

<210> 3538  
 <211> 162  
 <212> DNA  
 <213> Glycine max

<400> 3538

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<210> 3539  
 <211> 395  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3539

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 cacgtccatg ttagcggatt ttcgcttcag tgcattgat gaacctacat agaacctaat 180  
 agtaatatgcc atagtaaaat gactataaga atctccaatt tcttgaaaac aatacaataa 240  
 aattgtcttt ggtgaataaa gagaaacatt aacaagaaaa gaaattagaa ttaaatagtt 300  
 attgatagtc atagtacctt ttgccaaacta tgaactgcac aggcgtgcta agaattccatc 360  
 ttataaacia cccaagagta agcgtattgt ggatc 395

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 <211> 394  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3540

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 agtaaaatta cataacaact cttagattta tccatatcta aatgataaca aattggtttt 180  
 tttccaattg aaaagggtgt tgatgcgaac atacaccttg taattnttaa gtgagtctat 240

gtagcaaac cccatatata tatntttaag aggaaagaga ccatgactaa ttcgaagttc 300  
 agttgggaca taaataaagt ctgacaaaaa aatattttca tcaaggatca aacttaagta 360  
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 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
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 aatgagttca atatggttca agaggaaatt agatttcaag aatcaagatt caaggttcaa 180  
 gcttccaaga atcaagatca agattcaaga ctcaagattt aagaatcaag agaagactta 240  
 atcaagataa gtatgaaaac gttntttcaa aaactgagta gcacatagat ttttctgaan 300  
 acctttttac caaagagttt ttactctctg gtaatcgatt accagattat tgtaatcgat 360  
 taccaatagc aaaatggtt tcaaaaagct ttcaactgaa ttacaatgt tccaattgat 420  
 ttcaaaatgt tgtaatcgat ta 442

<210> 3542  
 <211> 392  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3542

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 caaaaccaag cttgaccaat cccgaccaa cccgggcata gtcagtcagt gagaacctgt 180  
 gatgtaccta agcaggcgag ctcttggcag tcaacagata aaaggaacaa agaccacaaa 240  
 gcaaggaggc ttgtgtggtg gttggccagc tgtgaatctt gtgtgatata tgggttatgg 300  
 cctctggtaa tcgattacta aggggtggta atcgattaca aagcttataa atgaagacag 360  
 gaggctaaga tggctctctg taatctcatt cc 392

<210> 3543  
 <211> 334  
 <212> DNA  
 <213> Glycine max

<400> 3543

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 gttgaatttg ttgttgtgaa tgtatgtatg catgcattct gatgatgcct aacaagaatc 180  
 gagcaaagtt gcttcacagg ataagcatgg cgttcgagaa taatacaaga ttgtttcaac 240  
 aaatcaagtc ttacttcgag attgactcaa gatcaagcct tgccttaata caaagtgtc 300  
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<210> 3544  
 <211> 245  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3544

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 agatatttat atgtagtcaa aaggagacta cttctttccc ttctctgagt ggaagtgaac 180  
 atgaagtatg ggatgaagag tgtagtgagg aattctaccc tcatgaagaa tgtgacctcc 240  
 taatg 245

<210> 3545  
 <211> 362  
 <212> DNA  
 <213> Glycine max

<400> 3545

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 accgatcaga atccagagaa acttcatcaa atggcagagc cgtcaaagaa gagaagggga 180  
 tcattttcca cgtcacccg tgcgtcccat cgcggtcacg gcccatccgg agcaccaca 240





aataggcatc acccatatct gagtggttca t

451

<210> 3548  
<211> 392  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3548

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gagttcaaga tggtcacgat tgaatcaaga acacttcaag gttcaagaga aaatttgatt 180  
tcgagagtca agattcaagg ttcaagcttt caagaatcaa gattcaagggt tcaagctttc 240  
aagaatcaag atcaagattc aagatacgta tgataatagt ttttcaaaaa ctgagtagca 300  
catggatttt tctccaaact tgittaccaa agagttttta ctctttcggg gatcgatacc 360  
agattgttgt aatcgattac cagtagcaaa at 392

<210> 3549  
<211> 351  
<212> DNA  
<213> Glycine max  
  
<400> 3549

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ccgaatgaag ggctatgacc attcgagtct ctcgagagct acctttgatc aatctcagag 120  
cgatcgatat attatgcacc tgaatcgac ctccgcgaga caagattcac cgttctagct 180  
tctcaagagc ttgcgctgga ctacttactc ccgcattaac agtgatgcgc ctacttaagc 240  
catacgagtt tgacatcctg accttttagac tgagtcgcgc acctacgttg ctgaaatcct 300  
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<210> 3550  
<211> 257  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3550

Figure 1 consists of 12 histograms arranged in a single column. Each histogram represents the distribution of the number of non-zero elements in the vector  $x$  for a specific value of  $n$ . The values of  $n$  are 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, and 120, labeled on the right side of each plot. The x-axis for each histogram is labeled 'Number of non-zero elements' and ranges from 0 to  $n$ . The y-axis is labeled 'Frequency' and ranges from 0 to 10. The histograms show that as  $n$  increases, the distribution of non-zero elements shifts towards higher values and becomes more spread out.

```
<223>      unsure at all n locations
<400>      3551
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<210>	3552
<211>	416
<212>	DNA
<213>	Glycine max

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<223>      unsure at all n locations
<400>      3552
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1506

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<210> 3553  
<211> 397  
<212> DNA  
<213> Glycine max

<400> 3553

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ggcttcgact cccttgagga gctttacact tgaggatatg gaagacgatt catctagatc 120  
tggttctatg acgaggctag agagaccatg cctcatgaca cccagacca ttactgatgt 180  
gcatatgggg accctttcca tgtatgtccg cagatgctgc taattctatt tgcatcaact 240  
ataatttgat ttacactact catatatctt atatgcacgc ttccccttgg agcggctgca 300  
ttatctttgg acccttgcca aagttacatt tttctcctct gaactgtaga tagatgcacg 360  
catcacggct cctaacatat tgcattggcg gcactat 397

<210> 3554  
<211> 129  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3554

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ctttacttgt agtgagtcca ttaatttctc atttgtctgt gactatgtct tttcgttctg 120  
ttttaattt 129

<210> 3555  
<211> 440  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3555

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agatgaattg tcacactctg ataaaaaaaa aaaattaaaa taacatgtca cacatgtctt 120  
tataaaatta tagaataatt aactgctctt tntctaattt tttagcactc caatctgggt 180

catcacagtg ctttttctcc tggtttacac tgatggtaag cgagtacatc ttataataat 240  
 ccaccaagcc taaatcattt actgattatt gattaaatgt attactataa ttacattntc 300  
 gtgccattat tgtatatgga gaggttgga ctcttattat tggcaggggg atttaatgac 360  
 ttgtttctaa tctctgatgc ttatcataat tgttgagata caatgtattt gtcctagaga 420  
 ctctagttat attactctct 440

<210> 3556  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3556

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 caaaatcaat gccaccaatg aagaggaaag attctgatca actaattgcc cacactgtta 180  
 ggcaagcaat gaaagcctct ccattccctt ttaagatatt ttaattttta tatttcataa 240  
 tagttgtgaa tgaactgtga caagataaat tacaaaagct ttgttttggg tacttgcaat 300  
 gtacctttta aatttgatta agtntaatnt aaaacataat taagatagtt ttttaacatg 360  
 ctcaaaacta taaaagaaat acgtatcatt aagtttaaaa ccta 404

<210> 3557  
 <211> 334  
 <212> DNA  
 <213> Glycine max

<400> 3557

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 agcgagactt gttgcgaaag gatacacaca agtggaaggc ttagattacc ttgctacttt 180  
 ctccaagtg ccaagctcac catagttcaa ctattcttg ccttttgcag ccattttgat 240  
 tggcatctca agcaattaga cgtgaataat gcatttcttt atggagaatt gatgaagaag 300  
 ttacatgagt ctttctccag aatgcatcag ccta 334

<210> 3558  
 <211> 463  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3558

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 caagatcaat cactagcatt tgtgggtttg tacttgcccta gaccgatgtt tagtcataaa 120  
 caattatatg tggcagtttc aagagttcaa agaaaacaaa gattaaagat ctttaattcat 180  
 gacaaggaaa gaaaaccatt gaagtctgct actaatgttg ttttcaaaga ggtatttgaa 240  
 aacctttaat aagtatgtcc acaagtgcta ctaattctat ttgtatcaac tataatttga 300  
 tttaacaatac tcgtatatct tatatgcaag tttcctcttg gagtggctgc attatttttg 360  
 gtccttggcc aaagttacat ttttctcttc tgaaatgtag atagatgcaa gtatcatggt 420  
 tcttaacata ttgcattggt gggaatatgt ggaaacaata tga 463

<210> 3559  
 <211> 473  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3559

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 aattgttgaa tgaattaatt aagattaccg aaatgcaaac caaagccttg cttttataga 120  
 ctcttcatgt ctggtaaga gaaccattag aagagttata acctttagaa aaactntaaa 180  
 aaccatttga aaaagttgaa aactatttga agagttacat cttttgattn tgttcagaaa 240  
 ctatcactgt taatcgatta ccaaatacgt gtaatcgatt acacanagct tttttgtgaa 300  
 aggatgtnga ctctttcaca attaaattga attccaacgt tcaaacacac tggtaatcga 360  
 ttaccanatac attgtaatcg attacaacat tntgaaataa attggaacgt tgtaaattca 420  
 gttgaaggct ttntgaaaaa ctatttgcta ctgggaatcg attacaacaa tct 473

<210> 3560  
 <211> 458  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3560

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aatcaccatt aaaggacccc attgaagctc aaagatccag cctccataga agccccacaa 180  
gcaagcctcc atcaagtggc aatcagagca caagagcttc aagtaggtgc tccttaaacc 240  
tccattatct tttttgcttt accttctctt ccattgttgt ttcttcattt tttctccatg 300  
tatctcctca catgtcttgt gctaaatggt gttaacatga ttcttttagag tttccaccaa 360  
ttaaacttgc tatagaagct agatttgatt ntctatgggt cacatttctt gttcttggtc 420  
ttgaaccatg aattgtgttg agtttacggt cctttgag 458

<210> 3561

<211> 374

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3561

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ggagatatgt cgcggtgggc aggagacctt gnggacgtca ggtgggggtgc tattgcccaa 120  
aaccaagctt gaccaatccc gaccaacccc gggcatagtc agttagttag aacctgtgat 180  
gtacctaaac aggcgagctc ctggcagtc acagataaaa ggaacaaaga ccacaaagca 240  
aggaggcttg tgggtggctgg ccagctgtga actttgattg atatgtgggt tatggcctct 300  
ggtaatcgat taccaagggt gggtaatcga ttacaaggct aaaaaaatga agacaggagg 360  
ctaagatggt ctct 374

<210> 3562

<211> 304

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3562

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nattttttgc ctgggctgat acttttcaact agcggtttgta gaggctctat agcgctattga 120  
 cagcctataa gcaaaactaca tgtagatgct gtcgtagata tagaactctg gttgggtgtga 180  
 aaagttgctt ttccatcatg aaaatgaaac tcagattcca gaaaagattg ccgtatagag 240  
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 gctg 304

<210> 3563  
 <211> 456  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3563

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 acgccaacga tttttctact atatatngac tgccgacagg agtacagaag tcatacacta 120  
 ttcttagaat gattataacc ctgggtccaca gataaaagac aatggctgct cacctggctc 180  
 gcctctccta cttttacact ccactctggc atcacaagct ctttctctgg ttactactgg 240  
 tggaaccaga catcttataa tatccccccag ccaatcattc actgatactg cataacgact 300  
 actataaaca ttctcggcat atttgatatg gaaggctcga ctctatatgg caggggaatt 360  
 aagactcgtt caaccctgac gctatacaat gtgaacacat gatgtctccc aaacctatat 420  
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<210> 3564  
 <211> 129  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3564

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 aatgcgaaaa aggatgaccc tagggctaca aactcgtcaa tcccgtgggt atggcttntg 120  
 aaagggggg 129

<210> 3565  
 <211> 154

<212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3565  
  
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 ccctaatttt gcacaagata ggctttaaat aggt 154

<210> 3566  
 <211> 375  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3566  
  
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 tttgcaacga gaattgcctg cggatgcagc ctggtacata tataccacaa caaattcata 120  
 ataataataa taataataat aataataata aaaaatgaac tggatgcact aattaatgat 180  
 ggagacaagt cttggcttat ttgaaagaag ccatattgac atgaaacttt aaaatatata 240  
 ctttaaaaga cagtacttga aaaaggagga cattgaccct ttgggttanca attctaccat 300  
 ttgattttct tggtaggat gacatatgtg atacgtctaa attgaaggaa atacgtataa 360  
 ggagattttc ttact 375

<210> 3567  
 <211> 169  
 <212> DNA  
 <213> Glycine max  
  
 <400> 3567  
  
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 gaaagcagct ggggtgggacc ttgatgctga tgccaactga ctcgaacct 169

<210> 3568  
 <211> 79  
 <212> DNA  
 <213> Glycine max



<223> unsure at all n locations  
<400> 3568

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cgaagacggt ggaagggag 79

<210> 3569  
<211> 424  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3569

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acacgaaaaa ttagggaact tagaaaaact aaatccttaa ttgaaggcgt aggtgacaat 180  
catagtgaat tactaaataa gattgcggtg ttacttaagg acattccaga tactcccaa 240  
acctcgaaaa atacttccaa aatggcaaca agaagtacct ccaaattaat taatgctatt 300  
aatgaagaga gtggccacaa ctgagataat gatcatgatc acacaagaat ataaatccac 360  
ttaatttcaa cactggaata caccctccag attatattat caacgtccga ctgcccctgat 420  
cttt 424

<210> 3570  
<211> 406  
<212> DNA  
<213> Glycine max

<400> 3570

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tcctaaagaa gctaaagctt agctacacac acctctctaa tagctaagtt cacctccttg 180  
agatgagaag ctagagctta gctacacacc ccctataata gctaagctca ccccatgac 240  
aaaaaacat gaaaatacaa aaaaaaaaag tccttactac aaagactact caaaatgccc 300  
cgaaatacaa ggctaaaacc ctatactacc agaatggcca aaatacaagg cccaaacgaa 360  
gggaaaacct attctaatat ttacagagaa tccaaccttg agccat 406

<210> 3571  
 <211> 405  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3571

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 ctactcttat aacaaaaatg gcgtagaacc tcttccata aatacaaaaca tcaatgtaaa 120  
 ttttagagcaa gcttatgcgc atatttcctt acgaacgttc actngcaciaa gacatcctat 180  
 caactaagaa aaatgcaccc atatacaatc aaggtagctt cattacctag attatgtact 240  
 tccaaggtgt atntgttatt tacatcacac acgctcctt ggctgaattt acatacatgc 300  
 atactcaaag cattttgggg taccaaaaac tgcacatgcg ctcatcttgg tatttctaata 360  
 acccatacat atacaaactt cacgatgaat cttgactacc tacac 405

<210> 3572  
 <211> 616  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3572

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 cannnacagn cgannnacga gagacgagcg cgcacgcana gcaagcnnca caacacgagc 180  
 aangnaagnc atatatctct gttaacaac gcgagaaaca cgaacgcgca acgcgagcag 240  
 aangtgcgcg gacaacacga ccacaccacg cgacaagaca caacgtaacc gaccgccacg 300  
 ccgcaacctc aggaaaaccg aagcacagca aagaaccaca aaacacgcaa catagctcgg 360  
 agaaacaata agcaaagaag caaagcacc cccaacaaa gcaccacaac aaacaaacgc 420  
 gacgccagct gggaaagatg ccccgaaacga agcgacgact aaccaacgtg aaaccaagac 480  
 caacatcaac gcccaaacca cgcgctggac cgaacaacac gaaaaaccgc nccaggaccc 540  
 cgcctaataa gaccatttgc agcaaccggc acacgaaccc aaccagcgaa acacaccggc 600  
 gccgacgacg cccacc 616

<210> 3573  
 <211> 138  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3573

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 gagatgagct tgtgagtg 138

<210> 3574  
 <211> 160  
 <212> DNA  
 <213> Glycine max

<400> 3574

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 tgatgcctat gttgccaaat ggggccatat tacgacatga 160

<210> 3575  
 <211> 359  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3575

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 caaacacgtc caccacgaga atattgtcgc ggaacgaaac cgcagtgtg taatacagag 120  
 aattcttcca ccaaaacata aggaccctgg tagcgcaact actccttgat caatcgaaga 180  
 agtcactctc ggaaaggctc tcattgactg gggtgccaga atcaacctaa cggcgctctc 240  
 tatgtgtaca aggtcgggag agctggaaat cacgctcacg agaatgactt tacaacttgc 300  
 taaccgatcc atcacaagac cttacggtgc agatgaggaa gtactgacta gagtgaaac 359

<210> 3576  
 <211> 297

Variable	Mean	SD	Min	Max
Age (years)	34.5	10.2	18	65
Gender (Male/Female)	15/15	0	0	30
Marital Status (Married/Single)	10/10	0	0	20
Education (High School/College/Postgraduate)	10/10/0	0	0	20
Occupation (Student/Teacher/Other)	10/10/0	0	0	20
Religion (Muslim/Hindu/Christian)	10/10/0	0	0	20
Income (Rs. 10,000/20,000/30,000/40,000/50,000/60,000/70,000/80,000/90,000/100,000)	10/10/10/10/10/10/10/10/10/10	0	0	100
Health Status (Healthy/Unhealthy)	10/10	0	0	20
Smoking Status (Smoker/Non-smoker)	10/10	0	0	20
Alcohol Consumption (Yes/No)	10/10	0	0	20
Exercise Frequency (Daily/Weekly/Monthly/None)	10/10/10/10	0	0	40
Stress Level (Low/Medium/High)	10/10/10	0	0	30
Sleep Quality (Good/Fair/Poor)	10/10/10	0	0	30
Appetite (Good/Fair/Poor)	10/10/10	0	0	30
Weight (kg)	65.5	10.5	50	90
Height (cm)	170.5	5.5	160	185
BMI (kg/m <sup>2</sup> )	22.5	3.5	18	28
Heart Rate (b/min)	72.5	10.5	60	90
Blood Pressure (mmHg)	120/80	10/10	110/70	130/90
Cholesterol (mg/dL)	180	40	140	220
Glucose (mg/dL)	90	15	70	110
Hemoglobin (g/dL)	14.5	1.5	13	16
Hematocrit (%)	42.5	3.5	40	45
White Blood Cell Count (x10 <sup>9</sup> /L)	7.5	1.5	6	9
Platelet Count (x10 <sup>9</sup> /L)	250	30	220	280
Urea Nitrogen (mg/dL)	10	2	8	12
Creatinine (mg/dL)	1.0	0.2	0.8	1.2
ALT (U/L)	25	10	15	35
AST (U/L)	20	10	10	30
ALP (U/L)	100	20	80	120
GGT (U/L)	30	15	15	45
LDH (U/L)	200	40	160	240
Protein (g/dL)	7.5	0.5	7	8
Albumin (g/dL)	4.5	0.3	4	5
Bilirubin (mg/dL)	1.2	0.2	1	1.4
Triglycerides (mg/dL)	150	50	100	200
HDL Cholesterol (mg/dL)	40	10	30	50
LDL Cholesterol (mg/dL)	120	30	90	150
Total Cholesterol (mg/dL)	180	40	140	220
Calcium (mg/dL)	9.5	0.2	9	10
Phosphorus (mg/dL)	3.5	0.2	3	4
Sodium (mEq/L)	138	2	135	141
Potassium (mEq/L)	4.0	0.2	3.5	4.5
Magnesium (mg/dL)	1.8	0.2	1.5	2.1
Zinc (mg/dL)	1.2	0.1	1.0	1.4
Copper (mg/dL)	1.1	0.1	0.9	1.3
Iron (mg/dL)	60	10	40	80
Cobalt (mg/dL)	0.1	0.05	0.05	0.15
Nickel (mg/dL)	0.05	0.01	0.02	0.08
Manganese (mg/dL)	0.02	0.005	0.01	0.03
Selenium (mg/dL)	0.05	0.01	0.02	0.08
Vanadium (mg/dL)	0.01	0.001	0.005	0.02
Chromium (mg/dL)	0.01	0.001	0.005	0.02
Molybdenum (mg/dL)	0.01	0.001	0.005	0.02
Cadmium (mg/dL)	0.01	0.001	0.005	0.02
Lead (mg/dL)	0.01	0.001	0.005	0.02
Mercury (mg/dL)	0.01	0.001	0.005	0.02
Barium (mg/dL)	0.01	0.001	0.005	0.02
Strontium (mg/dL)	0.01	0.001	0.005	0.02
Yttrium (mg/dL)	0.01	0.001	0.005	0.02
Zirconium (mg/dL)	0.01	0.001	0.005	0.02
Antimony (mg/dL)	0.01	0.001	0.005	0.02
Bismuth (mg/dL)	0.01	0.001	0.005	0.02
Thallium (mg/dL)	0.01	0.001	0.005	0.02
Plutonium (mg/dL)	0.01	0.001	0.005	0.02
Neptunium (mg/dL)	0.01	0.001	0.005	0.02
Protactinium (mg/dL)	0.01	0.001	0.005	0.02
Uranium (mg/dL)	0.01	0.001	0.005	0.02
Thorium (mg/dL)	0.01	0.001	0.005	0.02
Radium (mg/dL)	0.01	0.001	0.005	0.02

aagaatatcc	ctttattttac	aatattgtca	cctttaataa	tttatcatca	gttcgagaga	60
taatatcggg	tttgatcaaa	attaatgtta	acgagcattg	tttattaagg	tcgtcaaagg	120
aaacttattg	atgcaatgct	acccgccaaag	ggcattggat	agaagactcc	aagaagattg	180
ggtcagatag	gcaagagaag	gccctagggg	tctcaagagc	cttatggtag	atttcggggac	240
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<400>	3577
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aaggagcatt	tcctaataaa	caggctgtta	atggaaatgg	aaagaatata	tatggatggg	180
gaattgggga	gaatgtaggc	ataatcactt	gcgacacaag	caagatacca	aaggctcata	240
attctttgta	agaatgaact	attctcggtt	ctgtactctg	ctttaccagt	ataagaagaa	300
caggttactt	ccattatggt	cttctgttcg	ccttaatcta	gatagtacac	atcattttgt	360
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<223>      unsure at all n locations
<400>      3578
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agagcagtga	ctgttgctaa	agggggaacc	ttttggagga	gagattatct	cctatttttag	180
ttaatagaat	atttgggttc	ccaacaaaaa	atgacgcagc	tttttgcata	aatatattat	240

tgaattactg	actgggcggt	caatcttatt	gatacttcct	ccctcatggt	ntacacaaat	300
atcattgata	cgtcccaaat	catcagtctt	actgaatgaa	accgggtacc	cacaataacc	360
agtgatgaaa	ctgagacgga	acatatgaca	gaccatagac	gagaccaatc	agttcataat	420
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<210>	3579
<211>	461
<212>	DNA
<213>	Glycine max

cctctcagtc	acctgcggca	tgcaagcttt	gaaggtgcgt	atcccaccat	cttatcttag	60
tttaatactt	gtaatgcgcc	taccatcacg	attattgtct	ccctttccat	cattgagggt	120
accacttggg	ttgccagatc	cctccacctt	tgggcgtatt	ctttgaaaga	ttcatgcctt	180
tttttgcaca	tgttttgtag	ttgtatccta	tccggagcca	tatcaaaatt	gtactgacac	240
tgctaacga	aggcaaccat	taggcctttc	cgagaatgga	ctcggaagg	ttccaagtta	300
gtataccagg	tgacagctgc	gctagtaaga	cttttttggg	agaaatgtat	cagcagtttc	360
ccatctttta	cgtatgcccc	catcttccga	caatacattt	ttagatgggt	cttggggcaa	420
gcagtcacct	tgtacttgtc	aaagtcgagc	gccttgaact	t		461

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458

<210> 3581  
<211> 389  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3581

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tgtctaagac gaggagcatt aagggttatac attgcctgac aataccgctc atcaacataa 120  
catttgtgtg gtttgcagaa ttctttgagc ttaggatagt aagtattgtc ttcaactatc 180  
ctaagagcta gttctcggt aatttcaaac cactgggagc cttttcacca ggcactcatg 240  
ttgatttcaa attattttgt ttggtattag aagcatactt cccaatgag tgagaaaagt 300  
gtacataaca tatttaatat catgaacaaa caatttataa agactcagga taagatcatg 360  
aacaagcatg agccagaaac ccatgatca 389

<210> 3582  
<211> 385  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3582

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ctggataatg acgctgacca cagcgtgaat agcctcacga gtggatagta agaattctag 120  
cctcaacaaa agaggaccca agtaatactg ggaagagagg gaggggtcac ccaggtgatc 180  
ccaaaagagt gagaccatgt tgactggaca aaaatgaaga ccactcgtca aggttgaatt 240  
agaccaagag aggtctgtca gaacaaagag tgagaattgt tcacatgtat cgacaccttg 300  
tctggctatc caatttggag attgaagact attgaactta tgcccaatat gaacactccg 360  
ccaaattcta agagatggat ctttt 385

<210> 3583  
<211> 424  
<212> DNA  
<213> Glycine max

<400> 3583

gatcctaagc accgcggtg caagctgtac caagattctt ttctccttta ctgtcatct 60

ccaaatcgag agggaagggg gaagggggaa aagggaagag gaagaagcct tgaagataaa 120

gaattgtagt caactctttg attagtagtt gtttaagaac cctaacgact ttaataattt 180

tgtaattgaa ctcatgtatg attattaact ttatttttagt tgccttggtg attttcttta 240

gtatgtcagt ttctggcctt ggtccaagtg ctcatcttag tgagagcaat aaatatacct 300

cttaagcatt ttgtaaggac cttttttggt tgaataatta caatttttagc ttgggtgctaa 360

tagagaaagt gcttctcttt ggttctttct tggaaccctg attctcatca aagaatttca 420

ttct 424

<210> 3584

<211> 454

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3584

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ctataaatag atatgtaacc cctttcatit gaggtttgct ccattgtggc ggtaagtagg 120

gcattggctc ttttttttgg ttataggatt agaattctct ttgaatctta tcaaaggctc 180

ccatactttt gtggtgattc ctcaacttagc ttatcattct cctagagtgt ggcaccttcc 240

ttttcatttc ctgtctatgc catctttttc ttttggtatt tacttttcca tctcttttcc 300

tcttatttct tactatcacg ttctctaana ttngcaccat tgttacaagt ctttatcttc 360

gtgctaatta atatatttgt ctntaattcc tttaaaaaga taaccaactc aagggaagact 420

tgtaaaacag tatggtttct gctaaggatc atat 454

<210> 3585

<211> 451

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3585

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aagccgaggg gcttccgtaa cgtttccgtg agtgatttcg cgaaggtttt cgaccgttct 180  
tcgacgttct tcatcggttct tcagtcttca acgggtaagt acctcaaacc aagcttttca 240  
attcattcta tgtaccctg gtggtccaaa tttggtttca tgtattttta gtctcggttt 300  
catttacttt ttataccccc ttttgacgtg cttaagccat ttatttaagt catttctcgc 360  
ttaacctaaa aataaaaataa atttccaccg atcatttgaa ttgtatcatc cgtaaactct 420  
ggttgaaata aattccgacc gatcggtcgt g 451

<210> 3586  
<211> 470  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3586

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aatctgattt caggcttaaa taggtggcct tgtttgtgct cgtgagctta tcacacttat 180  
ggaccgctta gtgcacatta gtgaatttcg gcttagcgtg ttcctttctc gcttagcaaa 240  
tgaactgaag cgtggcactt agcgaacctg tacatcttat cttcttccag agtcttctc 300  
gcgcttagcc catgagtgtt gcgcttagcg gaggtcgcct aagccagcag aatggcttag 360  
cgagaagggtg aaaaatagca ctttccanag cttgcctaataaacctgana ttgagagaaac 420  
atgataatca aacaaacaat aaggaagtac taagtattta ttacctatac 470

<210> 3587  
<211> 449  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3587

gagcacctgc ggcattgcaag cttgtaggat tatggngtac ccatcacatg tgttactatg 60  
tcggcgggcg gcgatgggtgc acaacacgtt ttccacatcc acaatgcgcg cataaaccga 120  
ccatcccctg ttgcccacct ccaactgagc tcacgtactc ccacgtagcc catatcctct 180







atcgagagggc tggtaattga aattagaagc tctgagcaca ttcaaacgac aattactttt 120  
gactcggatg tgcgactgtg ttccgtagta tatcgagacg ctcgaaattg aaaactgaag 180  
ctctgagaca aagcaaacga caataacttt atactctgat gtccgatagt gtcccataat 240  
atatcaaaat gcttgtaatc gaaaatggaa gctcttataa aaatcatacg acaatctatt 300  
ctatgtcgga tgttcgattg tgtcccgtag catatcgaga cgct 344

<210> 3593  
<211> 371  
<212> DNA  
<213> Glycine max

<400> 3593

agcttgaggt gaaaccact ttaacttatt attttgctgc tggctgctaa ccgggaaaga 60  
cccttttggg tttggcataa cctatacaat gacgactgtc atctagaaaa aatatctgtg 120  
aaagccattc cttggacatg gaattctact catttgagtc ttatttcacg taagctctgt 180  
aatggctggc gtacctgatt tcctaccttg gcttttaatc cctataaaat catgaaagta 240  
cttttgctga ggaggtttta gcacggcacc atgtatcata tcactattac tgaatacgtt 300  
tcttcatcat atttatttac acactatgat tgtcaaggat gacgttttaa ctaatagttc 360  
cttctcaaat a 371

<210> 3594  
<211> 352  
<212> DNA  
<213> Glycine max

<400> 3594

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tttacaggaa agattctatt tcacctgtaa tccgattcgc aatcccgatg tgtgaccgcg 120  
ctatttcata taaaataatt ccttctctta tatgtgcaca taccagagtt gggtagcgc 180  
ttttttcttg gtcaaagtaa ttacaccatt ctaccagttt agcgggctgc gcaccttctt 240  
taccttacia taccaccac tgcacaatgc cctcacgtgt acctcaggcg cggcatcctc 300  
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<210> 3595  
 <211> 210  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3595

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 tctcgttttg tttacttttt ataccccctg ttgacgtgct taagccattt tacttaagtc 120  
 atttctcgt taacttaaaa ataaaataaa tttccaccga acgtatgaat tgtattatcc 180  
 actaacttcg gttaaaatag aattcaaccg 210

<210> 3596  
 <211> 365  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3596

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 tgtgctaaat gtttttaaca tgatatttag aatttccacc gattaaactt gctatagaag 180  
 ctagatttga ttttctatgg ttcanatttg ttgttcttat tcttgaacca tgaattgtgt 240  
 tgagtttaag ttcctttgag tcttgtcttg ataanttttt gtggctgaaa cctaaaccat 300  
 aaaattctta ctaaaacatt aaagtagaag ataacctcta aactctagag agacttgttc 360  
 tccta 365

<210> 3597  
 <211> 487  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3597

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 tgtggcgatt gggcgatggt gcaagtcgac tttccacatc cacaaatcac acataaatcc 120  
 accatcccca gttgccacc ttcaactgag ctcacgtact cccacgtagc cttatcctc 180

gttcctctca acaccgggtc cccatcaatc cctccaagct tccacaacat ccaagcaatt 240  
 caaaatccaa acatcatgca ctatcaaaaa caagaaaaca gggcagaggc agaaaactct 300  
 gcccaaaaaca caaaccaata ccacaacttt ccttactcac ataccccagt aacattctct 360  
 tcgttccaat ttgttcaactg ttggatcgac tcanaanatt tactggagggt ccctagtaca 420  
 taagtctaca tnttgaccgt tgggatctgc tagaanacgt ccagaacca atatgtacta 480  
 ccctttt 487

<210> 3598  
 <211> 448  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3598

taagtaataa taatagtaag aagaatatta ataactatta tctatancca ttttgtggca 60  
 ttatgaatga caggatgtag tgacataaag tgcttagaga gttcacttgc atgtgaaaaa 120  
 ttttcaaaaa gaaaaagact taagttaaaa ggataatgca accagattaa tacttccaaa 180  
 gaaaaaaatg ttttgcaaag acattttcag acaatttaaa tatttttatt tgactatatt 240  
 agtataaatc atctctaate catatatttt ttaatattat gttctttnta ttcattntct 300  
 tttgatatac tttgtgtttt aataatttga attcaatag attntgttta tcaattattt 360  
 ctggatttga catntactta tacgaaattt ataagtttct ttttttggtg gtatttacta 420  
 ggtttaaaat gttaattggt aaagacgt 448

<210> 3599  
 <211> 559  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3599

ccaccccaca ccgcctgcat gcgcaaacc acccccacaa acactcanct ccacaacccc 60  
 aacggatgac cattcatgca tacncacac cagacgcagc aggaagctna attaagatng 120  
 ncgaaccgac aattactttt acttatcaga accaccaccg gcccagaaa cgccacatcc 180  
 aggagcaccg cagccgcccg caagacaaca caaacaaga atctacatca accattaacg 240

tgagcacctc atctagccct gtgcctcgag tccaacccta gccaggaatg agagcagaaa 300  
tccagacacc acgaagaata caaagcccca ttgccacacg gaaccgacaa gaagaatccg 360  
tgaccatcct ttgcgcactc agcacggcac aaagtaagtc gagcacaact catacaaacg 420  
cggggggaccc tcaaacgacc gccgagccct caaaaccccc cctaccgact actgcgaacc 480  
caacaggacg ccgaacaacc acccacgtac caacacgcaa ccaaaacagg caagatacca 540  
ctccacaaca cgacaagcg 559

<210> 3600  
<211> 419  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3600

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tttaaaaaata aaggatcaaa atcgtaggaa aaaaaccaa ggatcaaaat tgtagattag 120  
aaattatagg tgataaaaat tacaatttaa cctaaaacat ttaatcatta tataataaaa 180  
tttaatagat ataaaatatt aaaaagtgc atttaattta aaattactct taagataact 240  
ttattgattc tcgtgataac tatatttttag agcttacttt ttatgtgcgg aaatgacaga 300  
gaatttttac atgtacaagt taataaatta tggtacagaa atatgttgat ggtctacttt 360  
ctggatattt taatatatnt ttataagca tttagttctt attaccatga cacctaaat 419

<210> 3601  
<211> 467  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3601

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tttcaccaag gataacaagt taaaccgtga ttcactacta cttacgtagc ctctaaccac 180  
aacctttcca cacgggttga tttcaagtaa tttcatagta gtaaaacaac gatccatgac 240  
tatgtgcta attcattcgc ttttcttttc totcccatat agaccacaca gcatggatta 300

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<223>      unsure at all n locations
<400>      3602
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<210>	3603
<211>	432
<212>	DNA
<213>	Glycine max

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tgtccctata	ttgagttcta	tttctaagga	tttttcaaat	acggaaaatt	ggagagggtga	120
aaaatattgg	ttaagtaaaa	gtgttacatt	tgcaacattc	tgatgtaaaa	tatagaaaat	180
aggttactgg	aaattttctg	ctcagcaatg	ttttgggatg	actggatcta	gatttttcaat	240
aataagaatg	aaccagaaaag	gagattaaat	ctacttcctt	atctaataaa	atctgttagg	300
gaacaaaagg	ctggagtagt	tttgagcttt	gaatgggtatt	taagaacact	tggtcagtct	360

ttaattcata tggtaattgt gagtatntaa tatattatga acttctcgta aataattgac 420  
tatatcta at 432

<210> 3604  
<211> 272  
<212> DNA  
<213> Glycine max

<400> 3604

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gatcagatca gcaccagaag tactgatgaa ttacacataa atacaagaca ctaagagtgt 120  
cgctttccaa ccaaaacaaa cctccaaaa atccactaca aaggataaaa tatccatccc 180  
aaacagatat acaatgcacc cagcccatat caactaatat aagccacacg gttcgaagac 240  
cattgggtga aggatatact gaagagattc tc 272

<210> 3605  
<211> 427  
<212> DNA  
<213> Glycine max

<400> 3605

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acccttttga cgtattctag gagctgagtc taagacttca aagagaaaaa gactgtgtca 180  
tcaagagaat cagcagtgac catggcagag agtgtgacaa cagcagggtt actgaattct 240  
gcacatctga aggcatact catgagttct ctgcagccat tacaccacaa cagaatggca 300  
tagttgagag gaataacagg actctgcaag aggatgctag ggtcatgctt catgccacag 360  
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tcacact 427

<210> 3606  
<211> 482  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3606





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 cacttatacc tataatgctc gccggagacc agcacgagaa gagtaaagac attgacccac 240  
 gctaggagaa ctaccacagg caccaaggac cacaagctaa accgacgagc aacacgacct 300  
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 cacacagcac ggaacaccac gaagcaagcg cccaaggcg cacactggca cccacggcca 480  
 gcagccaacc acgaccgacc acgccacaca gaaggcgaca accggaaacg acgcacagaa 540  
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 agccccg 606

<210> 3609  
 <211> 449  
 <212> DNA  
 <213> Glycine max

<400> 3609  
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 atgtgaacag ttctagataa ggggaatatca gcacaacaac aacaaacata aaaaaagga 180  
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 tccttatagg tattaataat atttgcaata acatgacaaa ggaattgctt ctcttaacat 300  
 tgtctaaaaa aaactaacat gataccatgg agtaacaaag ttcagataga ggtttcttca 360  
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 aggaaggagc tagggagagt gacatagct 449

<210> 3610  
 <211> 459  
 <212> DNA  
 <213> Glycine max

<400> 3610  
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attaaggaat atgccccaaag atggagagat ctgcgagccc aagtcgtacc gcccatgacg 180  
gagagggaaa tgatcacaat tatggtagat acgttaccca cgttctaata tgaaaagctg 240  
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ggactacgga aaggcaagtt cgaatatgct tccaatgtgg cccccaacaa caacagaaga 360  
gccctagtag tgggtgcgag gataaaggaa ggagacatcc acgctgtcac caccgccccg 420  
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<210> 3611  
<211> 382  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3611

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tcacgcacct actatgcata ccggggcaag atttcaccg tgccgctgca aagaaacgag 180  
tgtggatcat gtgcaccaac atgactacta ttacacagat atgtatgaca ttgctactta 240  
tcaacattct accctgcaga tgtatcaggt ggtctgtgtc atcccgacat aggtaagtat 300  
gcatatgggt caactgattt ctaatgtcat ctactatntg gagggagcgc gaccacaatg 360  
caccagtggt acccgagga gt 382

<210> 3612  
<211> 193  
<212> DNA  
<213> Glycine max

<400> 3612

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gccagagtca ccattagtca ccacaaacca tcattggtct tcatgtaaaa cccacaccga 180  
gaggaactct tca 193

ggctgcagct tgaagctgga gaaagctggt ttgttttgct ttacatgccc tactcccttg	60
agtggaattt gtattgggtc gttctattaa atgttgcac ttagtccata tcatatcttt	120
tgtgcatatg catcattgtg aataagtggg aagaaaattt ttaagttaga acaagttctt	180
cagaaggcaa aactctttgt tctaatactat tacagcctta ttgtaagcga ttacaaaagt	240
tgtctaaagc ttgtagagtt atgtctcgta tcgatttatt cacaaaagtt gtcatttaca	300
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<400> 3614

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agaacctgtg	atgtacctaa	gcaggcgagc	ttctggcagc	ctacagatat	aaggaacaaa	180
gaccacatag	caacgaagct	tgtgtggtgg	ctggccaact	gtgaaacttg	attgatatat	240
gg						242

<210>	3615
<211>	485
<212>	DNA
<213>	Glycine max

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<223>      unsure at all n locations
<400>      3615
```

1532

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 agattttcat cacgattaga ttataggatt atgtaatact tatttttaaaa gttatatatta 360  
 aaatattntt aatgaatatt gataagaaaa ctttacacca gtgtataaaa aataaaattg 420  
 taaaaaaaaat tatgaaaata aaatattgca ttacnaatta naaggaaaac ataatatatta 480  
 tttta 485

<210> 3616  
 <211> 477  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3616

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 acaggaaagt gaaccattat gtcaaaaaaac ttggaggaaa aatcatctct gattgacaaa 180  
 gaatttcaat aatttgtgat tctatataat gcaaactctc tacctggatc actntctaac 240  
 acaaagagcg aaagaaggat ccaaggtgaa ttaaaagatc aaccaccaca ctaggcattg 300  
 tgcttctaata tgctatttgt aataagtaat gtaacatgat atgtgtatca tgactctngt 360  
 agccagaata tttgtcagt atagcatgc attntgaaat atttgttgca ctcccatcta 420  
 ngcaattggc atctttcaag ataccacana aaatagactt ctttnttgta gtcatta 477

<210> 3617  
 <211> 189  
 <212> DNA  
 <213> Glycine max  
 <400> 3617

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 tttgaattag cttctggtt aaagattaat tttgccaaaa gccaatgttg gggtattggt 180  
 gatggtgat 189

<210> 3618  
 <211> 459  
 <212> DNA  
 <213> Glycine max

<400> 3618

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 atttgcttgt agtggttgaa tacagggtttt aatacatggt ttagacatat acatgtatat 180  
 ataaaaagta gtaacaatgt gctttacctg tacttgatat aatgaaacag cttccacaag 240  
 aacaccaatg gacaaaccaa cttcaactac aacaaagtaa ttcaccttca cctggagtgc 300  
 atataatgag taatggcatt agaagaagtc aaagccaaac caacttcaag tacaacaaac 360  
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 gttattcatg tgacgggcat actattctag tttctattc 459

<210> 3619  
 <211> 477  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3619

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 atcttcttgg aggaatcctt ttcctctttt tccctccctt tggcctttga agagaaggcc 180  
 ttactatcct tctttttctt ttgtttttct agtttttctt cctcatccct attatctttc 240  
 atagttagtt gatctttggc cacctgtgaa ggtgtttgag gatgcaacac anatttagtg 300  
 ccaagatggg tgagggtaat ctcattagtt aggccatttt aatgatctt cctatcanat 360  
 ttccatggcc ttcctaaaag aatatgcatt gcctccatgg gaactatata acaattaact 420  
 tcaccctttt atgtcccaat ggagaaagggt acctttactt gttggctaata tatcatt 477

<210> 3620  
 <211> 459  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 3620

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agctgtccta aactgtaggg aaaacaaaaa gtggggtagc acgtaccata gcagtacccc 180  
atggactctt aatattggga agtctggaat ctcccaacat tntgagagac tttgggttgg 240  
gatggcctag tctaagcct ccacaccgca ctcttcactc tcgctacttg ctagtgttag 300  
tggatagagt gtattcccat acccataccc ataccatga tagtacaaac acaaacacaa 360  
ctcaaaaccc cgtaaccgct aattaacgtc cttatatatc tcactctgctt ttttttggcg 420  
gcacaaaaac cgcttcttcc cactctctnt catccatac 459

<210> 3621  
<211> 402  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3621

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ggattntggc tgcagttatg attcttcagg ttttttttta ttaatttcca ccttgtttct 120  
gttatgttgt tgatgcttaa gataagcgca tgattgtaaa tttgataaga tgttgtttcc 180  
agagttctat ggatcctctg ttgggaacat tggcattatt atgtggatca tttgtctcct 240  
tattgaagaa aatgcatagg ttgagattcc ttcgtcattt acgcagggtg gtccacttcc 300  
ttgaattttg gaccttatta attntcaaca ataaaaattt tcttttcatt ntttttaatt 360  
aagtagaaga acgaagggtt tctttttccc tgcagagggg gg 402

<210> 3622  
<211> 463  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3622

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tagcctacaa gaaatgctta ttgtacacaa aaatgacatg ctaatccctc cggcttacaa 120  
cgaactcatg tgcacgttta acgaaacaca tttatgcaca tgcatacgta acaatatacct 180  
actattgatg tcaacatata aggacacca acacattcta attgccatac atctatgtgc 240  
atcttgaata gagcacacat tctcatgctc aaggcgctgc gtcaaacttt acacctaagt 300  
atatacctaaa ttttttctat ttacaaacta cttacacata tttgaaatat atatcatata 360  
aattgtattg tttcactcac atttatttat atgcatattg ganaactaat tatatacctgc 420  
acacacactt gcattcaaga gggaatttca cgctatcatg tgt 463

<210> 3623  
<211> 578  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3623

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ntttgacgcc tgagaccctg caaacaacnc agcaangaga aacggcgacc cccacacggg 120  
gacaaagcgg nttgcgggcg attgtgcaca acacgaacaa cagagacacg gagcgcgcat 180  
aaaccaccca caccagggg accaccagca actaagcaca cgtacgccga cgcgggccat 240  
aagcgcgagg gaccaaacac cggcgcccca ccaatcctcc caagggaacc aacaaccaag 300  
gaagccaaca cgcgaacagc acaaacaatc acagccacaa aaacagggca aaggcagaaa 360  
actccggcca caacaccaac cagaacacaca gcgtggaccc acgcaaagac cgagtaaca 420  
acgccaacga gccaaagagc gaaccgcagc gaacgcacgc gaacaccgac cggaagtccn 480  
aagaacacaa gccgacaaag cgaccggtgg gatcaacgac catacagcgc agaacacaca 540  
ccgaacaagg cgagacacag cccaccacac acacgccc 578

<210> 3624  
<211> 231  
<212> DNA  
<213> Glycine max  
<400> 3624

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ggagctcccc tagcgacatg tgaatgaaat cgccacaatt ttactgttta ctattaagaa 120



ataagggcgcc ggcggggggcc accactgaat gctcccatgg acaattatga acctaaaata 180  
tccatgatg atgatgccca tgcttggact tccatcgca gcgtacgata c 231

<210> 3625  
<211> 529  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3625

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aggaggcgag cgacgttatg agacgtttat gtgtatctat tctctacctt caccggaagt 120  
gatctcgacc acccttttta acgtatgttc tctcaagaga gcatgatagt gaacctttct 180  
gtcctataac ttggaggatg agtcacactc tgatggaact atgatgatag agagtcgtga 240  
gagactcata ctccaagatt atctcctgta tctctttctt actccaagag cgagctaccg 300  
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tgcaatgctc atcgtggcgt ggatgtgcat catgactgtg gtattccata ttggagggcg 420  
gctactctcg cctattgtaa tatgtgttgc gctgccttct cgcggtgtgg catctctaag 480  
atccgaccta tagagactca ttattctagc tcatagaaac cgcttagct 529

<210> 3626  
<211> 451  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3626

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gcttttatac atttttttat tctccatact gaatcgtaa agttagaagc tttgcttttt 180  
atcctctttt tgtgctagtt gtcacacag aataaaaaat gtaccagatt attcatgaat 240  
caggactcag atttgancta atttgaatct ttagtaagta gttgctagtg ccactaatta 300  
ttgaataatt gatttttggtt tatctacgtg atttactatt caaacatttg aatatggttg 360  
cagaataaga gttgcaactt ctgatatgag aatgggtgctc tcagttatat gtctcatgtg 420

gcactttctt tctttcttgc atctaccatg a

451

<210> 3627  
<211> 116  
<212> DNA  
<213> Glycine max

<400> 3627

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cattcactgc tcatgcgctt acgacatgga tgcctcatgg aggtagcggg acatta 116

<210> 3628  
<211> 103  
<212> DNA  
<213> Glycine max

<400> 3628

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atataggtgg gtaagacggt cgcctcccta tcttctctat cac 103

<210> 3629  
<211> 449  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3629

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caagatcaat cactagcatt tgtggggttg tacttgcta gaccgatgtt tagtcataaa 120

caattatatg tggcagtttc aagagttcaa agaaaacaaa gattaaagat cttaattcat 180

gacaaggaaa gaaaaccatt gaagtctgct actaatgttg ttttcaaaga ggtatttgaa 240

aacctttaat aagtatgtcc acaagtgtca ctaattctat ttgtatcaac tataatttga 300

tttacaatac tcgtatatct tatatgcaag tttcctcttg gagtggctgc attatttttg 360

gtccttggcc aaagttacat ttttctctc tgaaatgtag atagatgcaa gtatcatggn 420

tcttaacata ttgcattggt ggaattatg 449

<210> 3630

<211> 403  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3630

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 aaaactttaa aaaccatttg aaaaaagtga aaactatctg aagagttaca tcttttgatt 180  
 ttgttcagaa actatcactg gtaatcgatt accacatcag tgtaatcgat tacacaaagc 240  
 ttttttgtga aaggatgtga ctctntcaca attaaatttg aattccaacg gtcagacaca 300  
 ctggtaatcg attaccaaatt cattggaatc gattacaaca ttttgaaata atatggaacg 360  
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<210> 3631  
 <211> 339  
 <212> DNA  
 <213> Glycine max  
  
 <400> 3631

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 tcctcacatg tcttggtcta aatgttggtta acatgattct ttagagtttc caccgattaa 180  
 acttgctata gaagttagat ttgaatctct atgggtcaca tttcttggtc ttgttcttga 240  
 accatgaatt gcgttgagtt taggttcctt tgagctttga ctagttattt tttgtggctg 300  
 acacctaacc cctaaaattc ttacaaaaat attaaagca 339

<210> 3632  
 <211> 401  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3632

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 gtcaatgtcg agcatctcga catattatgc gctcgaatca gacatccgtg tgaaaagtta 120

tgaccatttg aatttctcga gagcttccga tgtttaattt cgagcctctc gacatattat 180  
 gcgcccgaat cggacatccg tgtgaaaagt tatgaacatt tgaatttctc gagagcttcg 240  
 gatggttaat ttcgagcctc tcgacatatt atgcgcccga atcggacatt cgtgtgaaaa 300  
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 atataagcct gaattgccct cagtgtctaa agtatgacca t 401

<210> 3633  
 <211> 330  
 <212> DNA  
 <213> Glycine max

<400> 3633

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 acgtttttac taaagatgac tcatttacat ctatgtttat gacggttttt ttggaaaact 180  
 cattttgaga gtgtatcttc tctgactgac atatatatat atatatatat ctatatatat 240  
 gtatatatat atatatatat tcacctact aaaaaagtat atagtggctg aaaaccctat 300  
 cttataatac acttgttcca tacatatgaa 330

<210> 3634  
 <211> 445  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3634

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 acttttgacg gaagaatccc atgttcaccc actaatattt aagcccaact ttaatcttta 180  
 ggaaaaaaaa taatcttaag acaatgatgt tagttaaccg atataagaat gttgtatttt 240  
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 agttgatctg attgaatatt ttaataattg agggactcaa ttgagctttt aattataatc 360  
 aagacattaa ttatatatta agcctttgaa aagtataatg agctaattat atttaataaa 420  
 taattaaatc gttggcatta atata 445

<210> 3635  
 <211> 425  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3635

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 cagatccaaa tctagaacga tgggtgatca agaggagaca caggaacaga tgaaagccga 180  
 catgtcggct ctgaaagaac agatggcttc catgatggag gccatgttag gaatgaggca 240  
 gctcatggag aanaaagtgg ccaccgctgt cgctgtcagt tcggctgccg aagcagacct 300  
 aactctcttg gaaccgtgcg ccaccctccc tcaaacatag tatgacggng aaggaacanc 360  
 gctgggcacg acggctgtcg gaccttgccg cctcaataat cttagaggga ataggcttag 420  
 aatat 425

<210> 3636  
 <211> 437  
 <212> DNA  
 <213> Glycine max

<400> 3636

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 aagtgaacaa aaacctgtgg taggcctacg gttgtacttg gaaggcagaa aaagtgatag 180  
 acttgcaata catgtacacc acctttcaag cctcccaaac actatgatct actcttcagg 240  
 cacatcttcg tggcgaggat ctgatgacaa tgaatccagt gacatctttc tggaacctat 300  
 aaggtggaag ggatttgcaa acgtgtgcac tgcagtgggc aaacatgacc ctacctggtt 360  
 gcaagaaaca agtgggtggtg tttatattgt aaccggcgca caactcatta ttaaaggagc 420  
 ttggccaaag aatgtgc 437

<210> 3637  
 <211> 474  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3637

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tcttttgttt ggctggntat tacttacact aatagatttg gtcacatgtc ttcaaccact 120  
aacgtctaaa tttttcttag cgatgatggg tttcccttaa ataaattaat actaatacta 180  
tatgatacta tgattccaat atggacagag cttttgggtc tatctccaag tccccccgat 240  
gctgctatct tcacatcaaa ttcttcgaag acaacacctt cagcacctac aacaacaaac 300  
tcgcatacca cgaccccgca gagccaaaac gcttctcatg gaagcatggg tcaacctagt 360  
agtaccgtta cctatgtgat ggtgatggct ntggccattg ttctggttgc agttccaacc 420  
gatactgtga gcatttatac atgatgcggc attatgccac tgtgaagaca gttg 474

<210> 3638

<211> 449

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3638

gcttaagctt gattgcacca ctcttgata ctagcatttt atccatgaag ccagaggata 60  
actcgggtgag ctacagagc tcctccacgt tttttgaacc cccatgaggt ctagacttca 120  
cattaacatc gctgcttcca gcagtagctg attgtttaat cataggcaat tttgtacgca 180  
aattaataaa gaacatactt gcctctgggt tgtgctccta ccaacaattt gttcaaaaca 240  
ctattataat aagtaaaaga agttaacatg ataaatttaa attcttgtac tcaccacaag 300  
gtcaagctcc attgctgaat atgatgcatt ttcatacata gctcttggct ctgcagcctc 360  
cccatattct tggatcatca gaagagctat cagaanaaaa catgtgaagt taaagtcact 420  
agcccactag atattgcaga gtatacata 449

<210> 3639

<211> 165

<212> DNA

<213> Glycine max

<400> 3639

ccgaagatgt tagctgtggg ttaagcattt aagattcaga gcaataattc tgtatagttc 60  
 ggtcagcgac ttaagatttc cgctgtttca ccatggattc atggttccgc acaaggatga 120  
 gcatggatag agttctttac gactgaataa ctgaataacg tggtt 165

<210> 3640  
 <211> 378  
 <212> DNA  
 <213> Glycine max

<400> 3640

cctgcggcat gcaagcttgg ttcgaggtag ttaccggtg aagatttatg tttgatttat 60  
 aacgaatgaa gaacgggtga aacctttgag agattcctca cggaaaacgt tacggaaacg 120  
 tttcgggaagt gctcgggctt agattttctt cacggaaaca atttttccaa gcaaattcga 180  
 aggagagaga agtgcctaag gggctggacc cttttcttct tcatttcctc ccctatttat 240  
 agcaaaatag gggaggtggt tgccgccag ctcgccagg cgagctcagc tcgccaggc 300  
 gagcaggggt gcttccttca gaagcaaccg tcttctggag gaatattcca gagggcccaa 360  
 gtgggcctgg gtgctatt 378

<210> 3641  
 <211> 453  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3641

tctatgtacc cgtagtggc cacattgggt ttcgtgcatt nttattctcg ttttgnttac 60  
 tttttatacc cctgttgac gtgcttaagc cattttactt aagtcgtttc tcgcttaact 120  
 tagaaataaa ataaatttcc accgaacgtt tgaattgtat tatccattaa cttcgggttaa 180  
 aataaattcc gaccgctcgg tcatgccgta accacgttgg aaatcaaaaa agaggtaata 240  
 aataatatta ataatacaaa aaataacatc ttttagtaaa ataaagcgga aaatcaatcg 300  
 gacgttttct ctttggaat tctcattctt aatcgaattg attaataact aaagtgaac 360  
 taaggctaaa atcaaatcgc ctagtcaagc tctgtcacia aaatagggtt ttgaagtccg 420  
 tcatttcaat cttccactaa gtaaaatgga tca 453

<210> 3642  
 <211> 208  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3642

agcttctgtc accttctccg ctgctccatt ctctttgcct agcccttctt catcctttct 60  
 tctaaaacat tntcaaacta aataattgag actcatcaat acactcatcc acacgctgaa 120  
 tttatgatcc atatcatcaa tgaaacttga gttaagtgcc ttttattttc tactactact 180  
 gtcttctata cactacacgt ttcactta 208

<210> 3643  
 <211> 438  
 <212> DNA  
 <213> Glycine max

<400> 3643

gctgacttat taagatgatg acaaagggtga tgaacaaaaa actcatagat caatcaaaga 60  
 acaactctag tgaatcatag aacatctcaa gtgaatcaag aacaagtcta gagttcaaga 120  
 taagaatcaa gaagaattca agactcacga agaaagtcta gagtcaagaa tcaagattca 180  
 aggttcaaga tctcaagaat caagactcag agattcatga atgaagagaa gactcgatca 240  
 agataagtat taaaaagttc tttcataact ttgaatagca catgagtttt tgacaaaacc 300  
 ttttaccaca gaggttttac tctctcataa tcgattacca tattgttgta atgcgatacc 360  
 agtagcaaaa tgagtttgaa aaagttttca aactggaatt acaacgttcc aattattttc 420  
 aaacggctta atcgatta 438

<210> 3644  
 <211> 356  
 <212> DNA  
 <213> Glycine max

<400> 3644

agcttatcta tttcttttga tgaacttcaa gattcatttt taacttgcac aaagaatctg 60  
 tcaaacttgc caaattattt tcatttttcta agaaaactat tttaaattta gaaaagaaag 120  
 ttttgaaatt aaatgtagaa ttataaaatc ttaaagcaga agttaaaaca ttaaaaccaa 180





<223> unsure at all n locations  
<400> 3647

tggtgccaac atgttggttaa cctgggttttc atttttttgc cttctttctg caccacacctt 60  
ccttctcctt cgacacacaa gttntgcttc gggatccacc attggcttat ggttgaagtg 120  
ttatggatca attgtagaca tgtctatagg ggtccaagca aaaatattca tattttctgt 180  
caaaaagtga gatagtttct ctaagatagg cggnggcaac tcagatccta ccttgacaat 240  
cttcatctct tctgggtccga ttttcactta cgagagctct ctttcaggaa ttgggtcttc 300  
gtgttggtcca ttatgctcct tgggtctaca atccaattct tttatcagaa tctattattt 360  
gcctgggatc aaaactagct tcttaaacaa agctg 395

<210> 3648  
<211> 428  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3648

agctntacag cagatttttag taatgactca ctatcctata attaaaataa cttaatgcca 60  
ttaacctagg gaattaaaaa aaacttaatg gctgagtgtg attgaaattg tggcaaccaa 120  
aagtcacccc caacagccaa caagtcagcc accatttgggt ctcccaaaag gctgatgcct 180  
aggttgccaa ttggggccctt attataactt gaactaaacc taactaaagc ctttttagtt 240  
gattaacca aaacatattt ttggtcagcc aactttacaa ggattggggc attatttaga 300  
caaactaaac actctaaaat tgagacaaaag tgggtgtcatt tagtcctcct ccatttgggc 360  
catgatacaa ctcacaacct tggacttttc tccttgaaac ttgngcttgt attcaaatag 420  
tatggaca 428

<210> 3649  
<211> 435  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3649

tgtatagct acaacgaatg atttctgggg cttattanaa ttatatcaca gctntgtggc 60  
tcttacaaat agattagaac cttttgaaca ttttacatat tttttacatt cactttcagt 120

ttataatcgc gtgtnttctc tcttttctct cttccttctt catgacttta cattcttata 180  
 ttcttcattg gtcttccatt gttcatggca ttcattgtaa gcatgtgcaa ctaaattctc 240  
 agttgctgga ataaaacggn gtagatttag agtatgtgcc agaattctct ctttctcaat 300  
 tgcaatccat ttctactcct ttgcttcatg tctatgctta ggcttgggtca acctacatta 360  
 natatacaaa ttcaagggtt agatagaaat tcatctagtt aggggcattg cnttgggcac 420  
 ccagtagttn tactg 435

<210> 3650  
 <211> 351  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3650

agcttgatag cacgcagaga ctaacgttcg cttcngcgcc cttcgncaat cgcgggccgac 60  
 aagcccgttg acacgcggtg atttacgtca tcttccgcgc tcacaagatc tgtcatactg 120  
 acttttgagt cacaatgacg ggcacaaata cagcagtggt tatecttata aactttttgc 180  
 tgtctgtaag acgaaaagca tgatagcacg catagactaa cgtcgtcttc tgcgcccttc 240  
 gtcaatcgcg gccgacaagc ccgttgacac gcggtgattt acgtaattct ccgcgctctc 300  
 aagatctgtc atattgactt ttgagtcacg ctgactggcg aaaatacccg a 351

<210> 3651  
 <211> 409  
 <212> DNA  
 <213> Glycine max  
 <400> 3651

cttaagtcga ctgcaggctg caagctttct ctgattactc tgctaggggt tttagcatta 60  
 gagagaaggg aaaaagatta taaccttcat tgcatagtct ttgtgtgatg aacaattatc 120  
 cacccataga tattatTTTT caaatataac gatgatccaa cgggttaataa gtccggaatt 180  
 gtagttttac taggaaagat ttgggtgtgt gtgggaaaat gagaggtacg tgtgggggggt 240  
 gtttctttca ccataagcat tatttcacaa attctaattg tggggatgcg tataaataag 300  
 ttccaaactt gatattagaa ttgcacgatg atccacaggc taatgaatcc gagatcattg 360

ttttaatgag ataggcctgc ttgtatccga tcaatgtctc tctcatttg

409

<210> 3652  
<211> 476  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3652

ntgagacctt tagccttgag nactgacaac acacacagcc taaaaggat atacttgaac 60  
aacattttgc agtttatcaa atatttacga ggcattggcaa ctcaagttca aacatgtgac 120  
atggccattg atgctacgtt tagaaatata cttatagcta tggtatcctt gccatgtatg 180  
gtgataacat cgtgattgca cgatgtagta tgacagagat taacacgttt gagcagctct 240  
tggcacaaaa ctcttaaaag aatgatcctg gtccatctaa aataatcatt ggtatgagaa 300  
ttcttagact cagaatagaa cgaatttctg agatgcctta tgagacatat atacacaagt 360  
tgcttacaag tttaccttgt agatttagac cagaatagcc tttggattca ttgaagtttt 420  
gaaaagaatc tttgctacag ataacaaaat gtaactgtag atgccttgct tagccg 476

<210> 3653  
<211> 329  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3653

agcttatccn cacaagagtg cagaacatct ggtgatgtct gcattgatta taggaggctg 60  
aatcaggtaa ctagaaaaga tcattttccc ctgcctttca ttgatcaa at gcttgagcgc 120  
ttggcaagta agtctcatta ctattttctt gatggttttt ctgggtattt acaaattcat 180  
attgctcttg aggatcaaga aaagaccaca ttcacctgtc cctttggcag ttttgccat 240  
aggaggatgc cctttggcct atgcaatgcc cttggtaacct tccagcggtg tatgcttagc 300  
attttcagtg attttttaca gacttgcat 329

<210> 3654  
<211> 363  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3654

ctataaaaact aagcttttgcc tcnaacatat tatttccaac ttccaatgct ctgngaactcg 60  
attacaaggc aatgtaatcg attaccagaa gacaattttg aaaaacaact tttaaaaaag 120  
gttttgaatt taaattttga atcatgtaat cgattatcag atgtttgtaa tcgattacca 180  
acaacggcac ttcagtaaac actttgaaaa gtcatgaccc ttcaaaatat aattgtgtaa 240  
tcaattacca aaaacctgta atcgattacc agtgaagagt tttaggaaaa atcttttgaa 300  
aagacacatc tctccaaacc attttgaaaa ggcacgaagg gcctatatat gtgtgtgtct 360  
gac 363

<210> 3655  
<211> 601  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3655

ccctcccca cncacccact cantcttcna ntgncgtcac acgttgggng aacacgnnnc 60  
gannnncagt cccccaacc acnnnttttag tcgtttgagg cgctgcacna ccgcgnancg 120  
cnagaacgac ccgaggcaag cagacccgac ggagcagaga tcaatcatcc gtttgtcatc 180  
accacacaag gggagaaagc gagtgaatga agacacgacc ccgacgccga cgaaagaaga 240  
accaaacacg acccacggtc gctgcacaga acaacacaaa accgcccccc caaacaacgc 300  
ccagagcgca gaagcccacg cgaccaagcc gtcgctcaca atgaaaggac ncaagccaga 360  
caaggcacat cgaagcgaat acccccacag gcaaccgccg accaacggcc cgaacacgca 420  
gcagccgcta caccacacaa gccaaaccact accagagaca cacaagcggt tgaaacacaa 480  
ccctacacca agcggggcaa cagaccaga caaaccacgg acgaaccac cccactcacg 540  
cgcacggaga ccaccacgca aggcgcgaca ncggcaaaca cgccccgcgc caccacgcc 600  
c 601

<210> 3656  
<211> 252  
<212> DNA  
<213> Glycine max

<400> 3656

agcttattaa cattaagggg tgtgattctg tattcttata gcacgacctt gataaaacac 60  
tcgttgacgt atttatTTTT ttggttcaat tttcactcgc atattatcct attttcagct 120  
atgccgtata ggctactgaa ttatatgtac gggttctctt ttacatgttt gacaattgag 180  
actggataga ttattctatc agggccgatg agtgaaagtt tttcacactt atttgttgct 240  
gagcacctct tg 252

<210> 3657

<211> 510

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3657

ttgaagacct gtgtgagcat tgatagtctt gtaganacnc gcacatagac aactaagcgt 60  
acaaagtnga gaagaatatt ctanagccac tattaagaat acatataggg tacacaacaa 120  
ggtaatatata ccagctactc ctcaattata tatatataag cctcaatgca acccctcaca 180  
tgttacatcc aacccttgta ttattaagaa gaggaaagac aaacttatat tatggtaaga 240  
gagataacca atcatacaag ctagtatgta tatgtatcac gtaacatgag ctgtgaaaaa 300  
agaaataccg tacactgaac ataaagcgta taccagaata tcgctgctcg tgaaagacag 360  
acatcttttg ctaccaactt attatgctaa ttatataggg cactccgtca agaaaaagta 420  
cagaaatgat tacttatcga tggatgtaat cggttcgagc aatgagctta aagcaagtgg 480  
ccttctagag caaacctaatt attatgtccg 510

<210> 3658

<211> 345

<212> DNA

<213> Glycine max

<400> 3658

agcttgtaga atggctagac atgatacatg tcttggtttg gtttgtttca aggataaaag 60  
ggatgcccga cattatttcc atgacacaaa tgcaaaaatg atgatttgga aactttatgc 120  
aaaactggtc atgcatgcac ctatgcgaac actcaagtgt caaattttta tggatcatgtg 180  
atgctagggc tcaggattcg tttcctctat tttaatcaac ccaatgtttc caaaatatgt 240

tcttttatca atttgtgcat tcatccgagt ccatttcggg cgtccgggga aatttcacag 300  
cattcacct tcaggtgata cacattttca aaaattggta tgatc 345

<210> 3659  
<211> 447  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3659

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gtatgtatac atgattntga tgatgtcaaa agaagaatca aacaaggctc attttgcttc 120  
aagattaata caagattatt tcaacaaaca aagtcttgat tcaagatttc ttcaagatca 180  
agccttgctt cacaatgaaa ggtttcaagt cattcaaggc acatgtaatc gattaccaat 240  
acatgtaatc gattaccaat ggtttgaaag tgtgtaatcg attacacatc atatgtaatc 300  
gattaccaga gactctgaac gttgggaatc canattttta atgaaaggctc acaactgttc 360  
aagaaaaaca cctgtgtaat cgattacact aattctgtgt cgatatccaa agaggattat 420  
caacgtatgt ctntccagt catatcc 447

<210> 3660  
<211> 210  
<212> DNA  
<213> Glycine max  
  
<400> 3660

cgcacatcgt tcgagcgac gacatttcac ttacaagga gcgaagcaga ggagaccttc 60  
gattctatta ctaccgcga cgcacaaaag tgggcagtta acttgaacgg tcattattgc 120  
caacgcggaa cgcattctgc gcttcactat ccatgttcac atattattgc agctcgtggt 180  
tacgcgcgcc cgaactacta ccaactctata 210

<210> 3661  
<211> 382  
<212> DNA  
<213> Glycine max  
  
<400> 3661

ctcaagctag agttcctcac gtacagtaaa gtggcaaaaa aatttcccca ttaatataat 60  
 tgtcctatac aatcgcactg agcaactata tcaccgagac cttcgcatca ttgcatgaca 120  
 tacttcataa atatgtgagt tagaataaaa atgttgcaact ctttaaggggt tactgctggc 180  
 agccaccata ctgaccacaa tatccatctc tatgtgatgc acgcgaccca cacttaagtt 240  
 ttacatgca aaccatccaa accacatggg caggtacaca cttaaacaca atcacacaca 300  
 ttggaaatat atgaacgatc aaaatggaga aaatcaaaat ccgaatctgc cttataacat 360  
 ctggcacaag tctttgcttt ga 382

<210> 3662  
 <211> 474  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3662

gtcacctgcg gcatgcaagc ttctcttggc ccttaggcaa accttcagct catccttcat 60  
 tatcaaactg nctactcgtg attgggtccct ttctctctc cgaagcttaa gctcactgtt 120  
 actgccccac agagccctc ggaatttggt ccggccgtgt tcttcctac gagccctttt 180  
 ggtctcttgt tctaaggcct tgggtgtagc tatatttaca tctctcagtt cggcattctc 240  
 ctttcggatc ttaagagctg ctgatttgaa cttttctttg actgtttggg cttgctcgag 300  
 ttctgtctta agggcctgca cctcttcgtc ttctccggt gcctcaactt cctccctttt 360  
 agtggttctc aaactcggga gccaatccaa accttgcatg tgggctttca accacttacg 420  
 gtagctaccg acgttggttac tgcctctgag ttctttgtcc ttcttttgca ccat 474

<210> 3663  
 <211> 437  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3663

gatgaganag tgtagaacgg tgaaacttcc tgcttttatt tgttgaccac atagtggttt 60  
 ctggagatat gtncgcgggg tcaagagacc ttgtggacgt caggtggggg gctattgccc 120  
 aaaaccaagc ttgaccaatc ccgacccaac ccatgcatag tcagtcagtg agaacctgtg 180



atgtacctaa acaggcgagc tcctggaagt caacagataa aaggaactaa gaccacaaag 240  
 caaggaggct tgtgtggtgg ctggccagct gtgaactttg tgtgatatat gggttattgc 300  
 ctctagtaat cgattaccaa ggggtgagtaa tcgattacaa gcttataaat gaacgcagga 360  
 ggctaagatg gtctctggta atcgattacc aaggtgtgta atcgattacc aggcttgaaa 420  
 acgaggtcac gaagcta 437

<210> 3664  
 <211> 458  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3664

agctntgaag agtgttgttn ttcaccttct cgctaagttt atatgctggc ttagcgagct 60  
 tctgctatgc gcaacactca tgggctaagc gtgaggaaga ctctggaaga agatgagcta 120  
 tacaggttca ctaagcgac tgcttcatct cactaagcgc accgcttcag ttcattccgct 180  
 aagcgagaat ggcacgtgca agccaaaatt cactattgtg tgctaagcgg tccataattg 240  
 cgctaagcgc acgagcacga acaaggccac ctatttaagc ctgaaatcag attttagaag 300  
 ggagtttgga ctgggattca gagctttgca tgtctagagt ttctagagag agaaaggctc 360  
 aagttccaga gagttttgag agattttgct gtgtgaagat ctgcagagac cagagcttga 420  
 agcaggagcc gatttgagag ctcgagatga gtttgtga 458

<210> 3665  
 <211> 474  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3665

tgctctnatt tacattgatg tttgtattta tgggaggagg ttatatgcca tttttgcttt 60  
 aagagtaatg tcccacaaaa actaactttc caaatgtttg ccttcgcagg aatggcacgg 120  
 aggaagcttg cctcaaagag gtccaggaag gacaaggcgg ccgaaggaac tagttccgcc 180  
 ccggagtacg acagtcaccg ctttaggagc gttgtacatc agcagcgctt cgaagccatc 240  
 aagggatggg cgtttctccg ggagcgacgc gtccagctca tggacgacga gtatactgat 300

ttccaggagg aaatagggcg ccggcggtgg gcaccactgg ttactcccat tggccaagtt 360  
 gatccagaaa tagtccttga gttttacgcc aatgcttggg caacagagga aggcgtgcgt 420  
 gacatgaggt cctgtgttag gggtcagtgg atcccgctga tgccgacgct atca 474

<210> 3666  
 <211> 595  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3666

cactccccta cactncctnc cagntancta cgcgtcctca ccnntcccta aaaatttgct 60  
 aatacggten cnactaccaa cncncnnccn nnattgaatc atcccctcgc acgncnnncn 120  
 anatcnanac gcagcaggca ggcgcnaca caactagaac aagacagcga gttgacgttg 180  
 gagaaccacg aaccgcacga cttggacacg cactaatgaa acaaatccgc acaccgcatc 240  
 aacagatgaa cccgacgcag gggggcccag agaaatgaca ccacacaagc atgcacgtac 300  
 aaagagcaag tcaaaagccc atacggctgt tagnggccat gaaccaagca cacccaaccc 360  
 acaggtcggc agagatgcct atctaaagcc gccgattgac gaatgggaga agctagggag 420  
 ccgcccggg acacaggatg tgacaaggaa gcaaaactcg acgaggacta taaacgactc 480  
 ccctactcat ggcacgacgt ccggctgcgg aaccacgac acaacctccc gcccgcacccg 540  
 cacggagcac aagaagccgc tacaccacaa cacgagagga aagcagacca cacc 595

<210> 3667  
 <211> 387  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3667

catacaatat ttagacaaaa actcgcctaa tagcatgaaa agaaattact gaaggcaatg 60  
 catatttaag tgcaaaacca ataagaatat acaatgaagg cgatgcgaat ttaagtgcaa 120  
 aacaaaaata aatatacaat gaaggcaatg caaatttaag tgcataacca aaaaaaaat 180  
 atacaagcag aaccaacatt ttcaatcatt gtctcaatat ttccaggatt tntagtctgc 240  
 atacagaaaa caagcaaatt aaaattttat taaatggtga tctcaaataa aaattacatt 300

agatatgac gaatcattac ttcagacatt cttggtataa tgactcagat gacactgaat 360  
agaaccacct acgacggtgt caacgat 387

<210> 3668  
<211> 453  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3668

agcttataat atattattac gctcgaatgt attcatcaga agctctcgag aaattcaaatt 60  
ggtcataact tttcaccggt atgtccgatt atggcgaatc acatctcgag acgctcaaaa 120  
ttgaacaacg gaagctcttg agaaattcta atggtcataa cttttaactc ggatgtccga 180  
ttcacgcgca tcacatattg aggcgctcga naaggaacaa cggaagctct cgagaaattc 240  
aaatgggtcat aactnttcac actgaggtcc gattcaggat tataatatat caagacgctc 300  
gaaattaaaa atcggaagct ctcgagaaat tcaattggtc atcacttttc acacggatgt 360  
ccgatttggg tgcataatat gtcgacacgc tcgaaattga caacggaagc tctcgagaaa 420  
ttaaatgggc ataactttat actgaggtcg atc 453

<210> 3669  
<211> 385  
<212> DNA  
<213> Glycine max  
  
<400> 3669

actcagcttg ccgcacggac gtgtccgact atgctctatt cgtggggaac atgctacgaa 60  
aggagagagc acgagatgaa gagccaatgg ttgatacatg gacggagatg aagatgatca 120  
tgaggaagcg gattgtgccg gctagctact caagggactt gaaattcatg ctctcaaac 180  
taaccaagg caacgaagg gttgaggagt atttcaggga tatggatgtg ctcatgattc 240  
atgcaaatat tgaccaatat gaggaggag ctatggctcg atctcttaat gtgttgacta 300  
atgacatacg cgatattgtt gagctgcacg agtttgttga aatggatgat ttgcttcaca 360  
aagcaatcca agtggagcaa caatt 385

<210> 3670  
<211> 441

<212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3670  
  
 ttaagacacc cgcggcatgc aagcttgacc aatcccgacc caacctgttc atattagttt 60  
 gtgagaacct gngatgtacc taaacaggcg agtcctggc agtcaacaga taaaaggaac 120  
 aaagaccaca aagcaaggag gcttgtgtgg tggctggcca gcggtgaact tggattgata 180  
 tatgggatat gggctctggt aatcgattac caagggtggg taatcgatta caaggcttaa 240  
 aaatgaagac aggaggctaa gatagtctct ggtaatcgat tacattgaaa acgaggtcag 300  
 gaagctaggg gagcttctgg taatcgatta ccaggggatg taatcgatta ccacgcttca 360  
 caagagaact ggaagactgt ggagacctct ggtaattgat taccagtctg tgtaatcgat 420  
 tacacagagg gatgtgtcac t 441

<210> 3671  
 <211> 434  
 <212> DNA  
 <213> Glycine max  
  
 <400> 3671  
  
 ctcagcttag atgggatcat tgaaaaatag atatatcttg atttctttaa tgtttaatga 60  
 atactctgat attgatgggc ttgatttatt ctacaaattg acagtactaa gagaagtgtt 120  
 aagagaagaa attagcacac caatagaact attgagttat attaaaactc tatattcttt 180  
 tccaaatggt tacattgcat ataaaattct attgacaatc tttgtaacag ttgctactgc 240  
 tgaaagacgt tttgaaaaaa agttgttcat aacatacaca gaataaagat gatctatatt 300  
 gcatctaaat tatattttaa taaacggcat attaaatgtg tacatgttaa ttgaagcatt 360  
 caaataattg gtgttacgag agaatgagaa gagaagtgat aacttggtac ttcaacgtgg 420  
 agcctaagaa tgta 434

<210> 3672  
 <211> 467  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3672

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ctccttttct taaactgaga accccattgg ttggttcata taaacattct cctcaaaatc 120  
tccattaaga aagacagttt tcacatccat ctaatgtagc tccaagtcac aatgggctat 180  
taatgccatg ataatcctga aagaatcctt tcatgagaac ggcgaaaatg tctcttaata 240  
atcaatgtca tctttttgag taaaatccct tagtaacaag tctagcattg taatgttcaa 300  
ggttgccatg agagtcattg ttagtcttga agaccactt tcaactaact ctcttataac 360  
cctttggtaa ttctacaagg tcccaaatat cattatgtgc catggaattt atctcttctt 420  
tcatgggtatt taaccacttc tcagaatcat cacagcttgc agcttgc 467

<210> 3673  
<211> 301  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3673

ctcagcttgt gatcctgac tacagacgac tcggttttat gctcttggtc ttaactatat 60  
ctaggnccaga tatatgctat tgtgtgcaca aattatatca acttgtcttc aaccctata 120  
cgaaccacat gcatgctact aacatgtctc ttcggtacct taagcacact gttattcaag 180  
gtattttttt tatggccaac ttatacaca aattacatgc atatgtggat gcagattaac 240  
gatcatgttc tgaaagttaa agatcaacca ctggcttctg tatcttctta gaaattcctt 300  
g 301

<210> 3674  
<211> 450  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3674

agcttcanac ttcgntgcat ctaaccacta tctctnttct tcactttcca tggcctctct 60  
aaagcactca ggttctccat catctgtag gatcacatac tcattagtag aatacctatt 120  
agaaggttgt ctttccttgt tggacctcct gagttgaact tgaggtggct cgatagcacc 180  
accaagattt tcacttctgt acatgtcatg ctctcttcca tacatcattt tgaacatcag 240

tatttagatt ctgaatatgc ggctgaactg gttcaaaatc aaccacacca acattgtctt 300  
 ccttgggtgt agacttcttc accttatcaa tgtcttgaat ggtttgggtct ttcattgaatt 360  
 tcacatcacg gcttctgaca agcttcttct caacaggatc atataacctg taaccaaatt 420  
 cattctcatc ataaccaatg aagatacatt 450

<210> 3675  
 <211> 383  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3675

ctgttgcaga ggtgccccaa ccttatcttt gatcatggng ctcaaccgca taagttctat 60  
 agtggtttga gatctcaaac ccagatgata cttgatgcct caactagagg cactatgatg 120  
 tccaagagtt cggaggaagc tattgccatc attgggtcca tatcagctag cgattatcaa 180  
 agacattatg atagagctcc aactaaaga aaaggtataa tggaggtaga cactcatagt 240  
 gcaattctag ctcaaaacac actcttgacg cagcaaattg aggccttagc aaagcagata 300  
 gccaacgttc tcacaatatt accaatgtgg accacaaaaa acacatcaag ctcaccaagt 360  
 tcaacaaatt ntgatatgtg att 383

<210> 3676  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3676

agcttcattg cttcatgatg ttgaatttag attgattcaa ggngctctga tgataacaaa 60  
 gatgatggca aaaagcccat gagaatgatt tcaagattga gtcaagaaca attcatgaat 120  
 ctagagaaag attcacgaga agtttcaagt ttcaagtttt caagaatcaa gaataatcaa 180  
 gatcaagatt caagactcaa gattcaagaa tcaagaaaag gctcactcaa gataagtaca 240  
 aaaaagtttt tcacaacatt gagtagcaca tgaagttttc acaaaagctt ttaccaaaga 300  
 gtttttactc tcgggtaatc gagataatca attaccggtt tactgtaatc gattaccaat 360  
 ggcaactttt tgtttcaaaa agctttcaac tgtgattata acgttccaat 410

<210> 3677  
 <211> 503  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3677

tgttagccct tanncttgaa ntccctgaana cggacacaag atactcagct tttctatata 60  
 taggcgcac t tatatgtact ttgacatatt atcgccggag cttcacggtg cgtgcgctga 120  
 ggtctcgaga ctgctacaac acttaatgct cgcatttaac gaacagtcct tcttacatgc 180  
 cagaaccatg cttgataggt aacgcacgtc ttggacttta ctaagaaagc cacttattcc 240  
 atataatagc tacgcactag caaatcatgc cttttgatga agaaacatat ctatcacact 300  
 gcagacttca cttacttctt catagaactt tgacatatcc caggagaatg ttttatgccca 360  
 gaaagacact tacacgccga ctattatatg acgatcttaa aagcactccc taatgtaatg 420  
 ctgaatgcct atatggacgt gtgttcgaaa ctcgaccgca gaatcaaatc atgatcgtaa 480  
 cacattcctt accctaattc tcg 503

<210> 3678  
 <211> 210  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3678

gctctgcagt tgaccttcag cttcttcnat tgagcaggac gaccaccttc atcagtggat 60  
 aacacctcat tctaaggctc ataatgctct tctcctcct tcttctcttc ctcataatat 120  
 tcgtccgagg tctcatgaaa aacgtcataa tctaattggct catcaaaagg gtcctcttct 180  
 aactctctca ctttatgcta aggggatact 210

<210> 3679  
 <211> 228  
 <212> DNA  
 <213> Glycine max

<400> 3679

agcttcgaca ttcaatatcg agcgtttcga taatttactg gacttaatca gacatccgag 60

taaaaagtta ttgtagtttg aagttgctca gagcttcaac attcaatata gagcgtttcg 120  
 atatattacg ggactaaatc agacatcaga gtaaaaagtt attgtcgttt gaattatctc 180  
 agagcttcgg cattcaagtc cgagcgtctc gatttattac gggactca 228

<210> 3680  
 <211> 333  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3680

actcaagctc tgaggaactt canacaacaa caactntnta ctcggatgtc ttattgagac 60  
 ccgtaatata tccagacact cgaaattgaa taccgaagct ctgagcaaatt ttaaacgaca 120  
 atacgttttt actcgtatgt tcgattgagt cccgtaatat attgaatcgc tcgaaattga 180  
 agaccgaagc tctgagcaaa ttcaaacagc aataaatttt tacttgatg tctgattgag 240  
 tcccgtagta tatcgagacg cttcgacttg aatgccgaag ctctgagtaa attcaaacga 300  
 caataacttt tttcctcgga tggctgattg agt 333

<210> 3681  
 <211> 260  
 <212> DNA  
 <213> Glycine max  
 <400> 3681

ctaagtcacc tgcggcatgc aagcttgtaa gagatctgaa cagaatatta gaatggattt 60  
 tatttgataa acaccaacg tggtatcaaa tacttacaaa aagagagcaa atgtagatat 120  
 gatacgagtt tatgatatga ttgaaagaca gatatagaga gagacactgg aggtgctggc 180  
 gtgctgttcc attgctcact attctccgtg ctatctctcc catcacttcc ctgctttaca 240  
 ctgacgctcc ttattctccc 260

<210> 3682  
 <211> 262  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3682



cagctctcct atttgctata aagggatgaa gcgaaaagat aatgggtcatt cccttaggca 60  
 cttctctctc tctcgaaata gctgaggaaa attagttccg tgaagaanat ccaagccgag 120  
 gcgcttccgt aacgtttccg tgagtaatta cgcgaaagatt ctcgaccgtt cttcaagatt 180  
 catcattcgt tcttcgtttt cttcagttctt cgactggtaa gtacctcaga ccaagctctt 240  
 caattcattc tatgtacccg tg 262

<210> 3683  
 <211> 458  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3683

catgcaagct tgttngncag aacaatggga atctngccta tttttttgct ttgtcccatc 60  
 ctgnctactg agatgaatcc tccaataaat ggaagctntt gcggttagtg ctcgtttaga 120  
 ttaaccctta tttatttatg agaaatgctc tcttggtcaa caactaacat tttgtcttta 180  
 attgcataac atatgacaac tagtggtgga agtttcatgg acacaaattc ttgatgaaac 240  
 tctaactttt ggaaagtttg tttgtctgag cctttgttag ctactaactc agctaatacat 300  
 gggccatcct ttgatttata tacgggcatg catatgctta gactatgcat ttaatttgga 360  
 aatatactga atgctccaaa ttagtatgtg ctatctattg cacaaccagc attcgtgtca 420  
 taaatggtga aattccaatt agacaagctc gagaatat 458

<210> 3684  
 <211> 461  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3684

ctacagaatg tgtacaaaga tgtctgcaaa gatatttgat ctctttaaca agttgagaat 60  
 gaatatgata gatattcact cgttaacttg aagggagtgg tgcattgttct tttttggact 120  
 gagtgagtgc acgttctaata aatcccacgc acattatttg ttgtataatg ttgtaattat 180  
 tgtaaactag aacaactcta tgattaccat attgctagac atatttttag gaaaataatt 240  
 atgtagcttt atatgaatta taaagaccag tactatttaa aattattaat aatattggat 300

agacctaact ttggggccatt ttcattactg tctcaatcaa ggagaaaagt ttanagaaaa 360  
 cagttgcact tctggacgca tgctgggtatc tgtattggca tgcattattat tcaacattgc 420  
 atttctaaaa tgcaggggaa taattgctta acttatatat t 461

<210> 3685  
 <211> 458  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3685

agctngtcca taagctctct ttcattagtag gatgaaattt gtctcttcct aagggcactc 60  
 ttaagatcat tcaaatactc tactggagga tccccatgaa tccttcgttc cctaacaagg 120  
 gaagtcacc aatagagggc atacccttga aagctaagg tagccaatgg aaattttctc 180  
 tctttgctaa tatgatgaca agcaaagagt tgttcaacct tcatttccca atctaggtag 240  
 ggctcaacat tatctttttc atggaaatat gggaggctaa tgtaaacctc ttgaggccgt 300  
 ctatcattnt ctcttctttg ggaatgggtg ttagtatgtg aactatgggtg tcctctataa 360  
 tagtcgctaa gttcttcact taaactcttg caagagtcac gattgctata ggagacatgn 420  
 ttttttcttt tcatttcttt cattattttt cttctttc 458

<210> 3686  
 <211> 481  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3686

actcaagctt tgtagaagtg ggtcactcta ttgaagcaac aatggaagat ttctcacaca 60  
 atgatcttag ctcgagattc tctcaattgg aaggctttga catgtcttca agattctcct 120  
 tgttgctctc ttaaagcttc aatgatgact attgaagtgg aggcactca actaaaaaac 180  
 ttatggaaga agcataaaaa ggtgataatt gtcgagtcac gacagctagt agagtcattc 240  
 tgagattgtc attatgagga gaccttttta tgagctttct aaagatacat caaatgggtg 300  
 attctaattg taactgagaa aagatctatg ctgaagcaca tccttttgat gaagtacaac 360  
 tganatggct ctctgaaata acatagcttc atcatgctta acacatcttc acaaagcatt 420

ctaaattagt ttgcatcata aatagaaatt gaaggaacag ttattagtct gttggtgtct 480  
a 481

<210> 3687  
<211> 173  
<212> DNA  
<213> Glycine max  
  
<400> 3687

agctacttct gtgcagtgtc tctctttata tattcaccca tcacagcatg gcgcttccct 60  
tgcgcaatat gcacattcag ctcaaateca tgaaacgaaa cacacattgc atcgtaagca 120  
agcattctat acaagacaag gcattcggcc attataactt actaagaaat cta 173

<210> 3688  
<211> 432  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3688

agcttgtaga caaactgcg gctgcatant tctatgtga cctttaccaa cctccgtcac 60  
ccttgttgcc caaattcctt tgatctctaa gtacatcagc caatacacgt tccatttcca 120  
aattctatgt aaaataactt ctgcttcct cattattttt tctaaaaact attcttttgt 180  
ctgtcatttt ttcattagat gactccattg aagttaatgt cacttattca acctgcacat 240  
aacaaatatt agatataacc tactttattc atttgactag tccactgcac aatcatagaa 300  
aatatttcaa gcaaagtttt tatgcaatag caaagtacaa aatattgtat cttcaataga 360  
taagtacaat agtaacaacg cacacaaagt ttgtctgcgt tagcaaatta caattaaaag 420  
agaactattc ct 432

<210> 3689  
<211> 446  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3689

agcttgtcca gcttcccatn tacttctctc atataatcag ccacaagaaa cctttntaac 60

tcttccacta cgcctcgagc tttacctata tgtgcaatca tatcatggct gatctgtttg 120  
 agtgtagcaa ctttttgggt tgcataaaaa aactttcaat attattggca aatatctctt 180  
 gggccttctt cctaaaagag caacatgttt tgaatgatct aaggatttcc aaaacatccg 240  
 gctcaacaga ttgccacaac acaacacata gttgaaagtc aagtnttcc cactcagatt 300  
 tcttgttgtt tgggacagca ctagctcctt tttccaagtg gtcatgatat ccttggccaa 360  
 gaaaccacaa ctccacttag gcagaccaag aaaagtagtt cttcccagtg agtnttgcaa 420  
 tagtgatggg gngggttcta gagaag 446

<210> 3690  
 <211> 467  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3690

tatacanaag aaaagtatgg atcgtgggtg cttgtataag tatatatgta ctcaacaagt 60  
 atgagaataa ggattaaaat tgttactcgg atgaatatga gtacaagtat tgtttttaaa 120  
 cgcggttata gaactggtaa ttttattacc atattatttt taaagtagat tatgagaagg 180  
 catatgattc ggtgagttag aatttttttt gtatatattg aaaagattgg gctttaatga 240  
 tacatggatt aaatggatac atgggtgtct ttcatectcc ttagtctatt attggcaacg 300  
 gaagtccttc caagaaattc atgcttcaac aggggttaag acaaggatgat tctcttgcac 360  
 cttttctttt tacaattgta actgaatgat taagtggcat gatgagagag gtttgtgata 420  
 aaatcttttt gaaaattata acgtgggaga gaaaaagatt gaatatg 467

<210> 3691  
 <211> 329  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3691

agcttcatta gttgttgcac tntagtatta attcctctta tggaagaacg ataaacattt 60  
 cttgcattgt atacttgtct gattgttgta taactattga catcgtgctc ctttaacgtt 120  
 agaagaatat ttcttggttt caccattgac tttgtaatat cagcaataat aatcttctca 180

tccttagtca atcgaccaac atatggatgt ccaactaatg acttgaccaa ttcattgattg 240  
 tgacattcac acattaactt caccattcat cctttgcctt ccaccactgg ttttacacgc 300  
 agcttaaagg cacacccaca ttttctact 329

<210> 3692  
 <211> 206  
 <212> DNA  
 <213> Glycine max

<400> 3692

tgagctatga gaagcttatg aggacctcct actctcttga aactcgaagc taatagtctg 60  
 cgcggaacga gaccgccttc tttcgacggc caaccttgat cttggagggc tggatggagg 120  
 actctgacct tgcaacatga actcgtccaa tatggtcac accaaggcca ctctcatata 180  
 tcatatcatt cagactctta gacacc 206

<210> 3693  
 <211> 243  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3693

agcttgagat gaggaagtgt cgaaggggtga aattttctgt tnttatagnc gaccacagag 60  
 tgggtacctgg agatatgtcg cggggggtctg gagaccttgg ggacgtcagg tgggggtgcta 120  
 ttgccccaaa ccaagcttga ccaatcccg cccaaccgg gcatagtcgg tcagcgagaa 180  
 cctgtgatgt acctaagcag gcgagctcct agcagtctac agattaatgg aaaacaggac 240  
 cac 243

<210> 3694  
 <211> 218  
 <212> DNA  
 <213> Glycine max

<400> 3694

gtaaggcctt gctctgtttt ttgcacttta ttgaacttta ggagagagaa ccttagatga 60  
 agtttttagat ttttagggac ataccggtt acaagcagtt aacattctac gacttttcac 120

atagtttgca gtatatacat tgaactgacg gttgtgcatg cttgatatgc ctgtttgagg 180  
tcttggaaca caaggaaaac aagcatgttt ttctgcat 218

<210> 3695  
<211> 453  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3695

agctntttga gccanaacct caactcattg gttataaacc ttgacctagg ataagaattt 60  
ttccttttac cctcggaaga gggaacaaaa ggatctccca agaaagaaga tccattcaca 120  
gttaagctga aaatgtgctt tgaaagcaaa agagaaaaaa gaaagggtccc gggcaaagggt 180  
tggaagaaag caaaagaaaa ataaagttcc cgatcaaaga tcgaaagata gaaaagaaaa 240  
agaaattccc aatccaagat tagaagaaaa caaaagaaat atatagaaag gtctttgacc 300  
agacaatatc tgaataacat tcaggattgt cacaacaag aaaaggaaag aaaggaaacc 360  
agagctgggtg acacatgaag cagtccccctt ttgattacca accaaaatcc tttgcgttga 420  
caactctttc accctacgct aaacataaac aaa 453

<210> 3696  
<211> 257  
<212> DNA  
<213> Glycine max

<400> 3696

aaaatggatc attattaagg tccaacgcct tataatgatc acctttcaag taaaaagaat 60  
cacttgattc acgcataaga aagaactacg taggtctgat ttctctctcg atggagggta 120  
cgtaggagca aaagccccgc ttttgtcgac ctcaaaaaat aaaaagaact aaaagttaag 180  
ataacacaat ttccataatt ctgagaaata ggttggtgtc ctttgagaca cacgtgagag 240  
gtgctaatac ctttctc 257

<210> 3697  
<211> 134  
<212> DNA  
<213> Glycine max

<400> 3697

agcttggtga ggggtctctgt tatggcttct aattgtcggg acaacagctc gatctgagct 60  
aagggtcgcat cttgagtggg gagtcctaga aggcttctct ttgttgccgc atatgtgcga 120  
tcaggaagaa tggc 134

<210> 3698  
<211> 330  
<212> DNA  
<213> Glycine max

<400> 3698

actcaagctt ctattgcagg aatttcatgc tttaccaacc ttttgccata ttgtagtcac 60  
gaagacctta gcaagggtac tggagatctt ctgagcagc tcacttcac aggatgttcg 120  
cacattcac gaacaatgcc tcgattgtca acataccaat tatatcacta ggaaaccaag 180  
gggactactt gcaccttcc ctataccaac tcgaccatgg gaagacattg cactcgattt 240  
gatcgtggat taaccatata ctgggggtat tctatcatac gtaggtatta ttgtcaacgg 300  
aaggccttcc cagatattca tgctttaaca 330

<210> 3699  
<211> 396  
<212> DNA  
<213> Glycine max

<400> 3699

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tgttccatga gccagtagtc ccatttaacc catgcaattt tcttctgac aaggctacca 120  
ccccataaga acctcctctg gattagcccc gattgctatt cccaataag agaaaggcag 180  
aggcatgatt catgcaattc aaataactgg cagcctgcaa tttccattgt tcagattggc 240  
ccagcacccc aaagctgctc ttcccataat ttattttaag tccttgatg agctgatacc 300  
attgagcatc ttcaatacac acagccacat ccacacactg gaacactcac acacacacat 360  
acacggccac acacacatct actcatacat ttacac 396

<210> 3700  
<211> 437  
<212> DNA  
<213> Glycine max

<400> 3700

tgcgtcggag ggtacatctc accatcatgt tattgtttat gagagacaga gccaaataat 60  
tgattcccag ttttctatag atgttgaaca tagtattaac taaaaccaa ctcgttgctt 120  
acattttcta acgtgtacat tatcttatat agtattcgtg tgatgatcct tatacttgga 180  
ttatcttggg tgatcctcta tgtaatgaac atagtacact atatactgat gcaagacgcg 240  
agcttgtcta cgtgcgaacc gtgtggatct atgggatatg gcctccgtac ctcatttctc 300  
ggatggctcc ccacactacg cccacaatcc aacatgcgcc tcattgcctc agctaccgct 360  
atcccatctt atcccgacac ctcccctcac ttcccttctc ctcttctata cctcacgtcg 420  
ttttatact ttcacg 437

<210> 3701

<211> 370

<212> DNA

<213> Glycine max

<400> 3701

acacatgcag caaccatgag gtatgtggga aattgtatat tacctatgac tccgtgctga 60  
cactaaaatt aagttcacia aataacaatc tgggagggtta cagacgcaca ttcactaagc 120  
ttcaattgat gactaaatgc ggtgaaaata caactttccg agtcttacct ttcattgata 180  
tgaacattta tttactcagt ggtactattg agtctttctt ttacacataa tttaccaga 240  
caaaataggg agagtatcca ataccatag ctatattatg accaatgcaa ataaacgtcg 300  
acgagtaa at catggttacc atttacaagt acgacagtag ctccgtcaaa aataatgtga 360  
gagtacatat 370

<210> 3702

<211> 425

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3702

ngaagttgct gagctgaaat ccaagtattg tggctctctt tgttnttacc cattatatgc 60  
tgtagtttgc ttgtagatt ttttctttat aggaatttat ggtcctgtaa gttcattgag 120



agggcccagg cactaataca tggagatcta cacactgggt ctgtgatggt tactcgtgaa 180  
 tcaactcaag ttattgatcc agaatttgca ttttatggac caatggggtt tgatattgga 240  
 gcattcttgg gaaacttgat tttggcttcc tttgctcaag atgggcatgc tgatcaagca 300  
 aatgatcgaa aagtaggtcc cctttttcca tgtcttctgt ggtccttact tgtcctcttc 360  
 tttgcatact ataagttgta tttagtcaca tttcttgta ttctccataa tctagctacc 420  
 actta 425

<210> 3703  
 <211> 297  
 <212> DNA  
 <213> Glycine max

<400> 3703

attttctctg taggcacata ccaagaagac cattagcgag agcccataga acagtcaaga 60  
 gaccagcaga gacaaacctt aggagaaaac ttgctgcaaa taaaggggga aagaatcaat 120  
 tgacagaata tcccacatta ttaatgattg aaagaaacct tgttttaaag actttattta 180  
 ccagaagaaa atattcaaga caaacacctt acgtggccga ccacatatat aaattgctct 240  
 cttggatgat ggacgtccac gaataacatg cctggaattc aatagatgat aagcatt 297

<210> 3704  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<400> 3704

agcttctctc ctgtcccgag actccatata tgagaaagag tgtatgcctt caggatctga 60  
 ttcatgggtc aggccatgg acttcgcaag aatccattgc tgcttggcct cttcgcagtc 120  
 ttcaaactga ttttcttctt ggtaaatagt cccctcaact gcctgtaact tagtggtatt 180  
 tgggccttca gaagacgcat catttaaacc acccatagta ttatcctcct tggagctatt 240  
 agcttggtca gggtccagct caaggagaca agcttttagct aggcctgtgc tctgcctcac 300  
 gtacacttta aggaatagtc cagaatccct ttttgtgact gggccagact gggtgaaatc 360  
 atatttgtag ccctctgttt ttttattggc cccgattg 398

<210> 3705

<211> 422  
 <212> DNA  
 <213> Glycine max

<400> 3705

gactcgagtc atcaagagat tataaatatg tgaccatggc atgagtttca aaaaaataat 60  
 catcaatcat ctttgaatca tctatctttc aatctttttt caacatcatc tctcaacatc 120  
 tttcaatcaa tctttcaata tctttctaca aaattttctg attcatttct cttcatcttt 180  
 ctaaaagttt tttatcaaca ctttcacttc caagaaaagt tctttgttca aaaacttgcg 240  
 ctattcatct ttttcattct tttctccctt tgccaaaaga acgaaggact aaccgcttga 300  
 attcttttgt gtctctcttc tcccttaca aagattcaaa ggactaaccg cctgagaatt 360  
 ctttgtctta acacattgga ggggtacatcc tttgtggtac aagtagaggg tacatctact 420  
 tg 422

<210> 3706  
 <211> 423  
 <212> DNA  
 <213> Glycine max

<400> 3706

agctttgaaa tccaaagatc taatccaatg tagatgtttc ataaatggga ttcctttgct 60  
 tgtgttgttt gattctggtg ccacccattc ctttatatcc tgtttgtgtg taggaaaact 120  
 taagctttct gtgtcttctt taaataaaga tatagtagta gagacccta ctagtgggtc 180  
 tgtgttaact tctgatgtgt gtttgaattg ttctgtggag atttctggta ggatattctt 240  
 gattgatttg atttgtttgc ctttgagcca gattgatgtt attcttggtg tggactgggt 300  
 atcttccaac catgtcttgt tgaactgttt tgagaaaagt gtggtgtttg atgattctgg 360  
 agtgagtaag gatatgatgt ttatctctgc caaccaaggt gtgacatctt taaaggaaga 420  
 tgc 423

<210> 3707  
 <211> 427  
 <212> DNA  
 <213> Glycine max

<400> 3707

tgtcgaaatt gccatgtttg ggtgagttag acatacctat tctgttttag ggtttttgtg 60  
 atgatgtttg tgatgtttat atgctgaaat tgctgatgga aatctgttag agatgaaggg 120  
 tagaactaac ccaagggttag aaagtgagaa tgtgacgtta tgagtggaaa aagagtgaga 180  
 ctttgagagt tggaaggcta agtctgaatt ctgtggtaaa tggagggttag agtgagttaa 240  
 tactagcttg aaatgtcatt tagaacatgt gagaaagggtt aggctgagct agagagaaaa 300  
 acaaatgacc aaagtgaaca aagagccatt gctagggcaa atttgggtgt tgaagagtca 360  
 aattttgatt cggtgagagt ttaggtgtaa atccagtttg aacaagtcta aatggatggt 420  
 atggact 427

<210> 3708  
 <211> 372  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3708

tagcatgtta taaatatatc tattagcata atttatacta gtgagaatat ttgtatgggt 60  
 atcttaccag aagcagagct cattcaccct ttgaatcaag atgtatagta ggtccggttc 120  
 tgcaacagta atgcaggtga tcctcttcaa tttgatcatg ttttgtttgc tanaacatca 180  
 taccatctat tgccatttac tcgaatttat agtcgctaac attagctact acaattaaaa 240  
 taacttaaca gggtattgca attctatcta gtatatataa gaaataatat ggcatgcagt 300  
 ttatacatat attttcttta taaagaggaa tcataatttg tatatatttg atgcatttaa 360  
 agtttttact at 372

<210> 3709  
 <211> 426  
 <212> DNA  
 <213> Glycine max  
 <400> 3709

tcactagttc atctcactgc tttaatgaaa actgcctctt acagctgcat ctctatgaag 60  
 accaaagagg attgtttcaa agtaattaat ttcatatctg ggtaaatact aaatactgag 120  
 tgctattagt tcctgtctag tcttccacta gaataaaagt agacgaggaa actaatagta 180  
 agttaaaaaa tttgctcatg tgcttttgc tagagttatg attttgtaag tttaacgcaa 240

cggaatggct aagttgctag catgtat tctgttgagc aggccctgta tttttgctat 300  
tctgtcagta ctccagtagc aacaaagcaa aatgcacact tagtagtacg tcagaactta 360  
agactacctt gcctcttaaa tcttataaaa atgctaaacg ctatgaatgt gtttctatga 420  
aaccac 426

<210> 3710  
<211> 419  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3710

tcacatattt gaagcttaac ttcttcagtg gctgtggctc acgggctacc tttaaacttg 60  
cccaatctat gacgccggtt cggaaaataa ccgtcttcgt attgaatggt tcgtgtactg 120  
ttatttacia aaaatgccac cggtcatttg ttaaggacgg ttttagtaga accgtcctta 180  
ttcacgcgtc gtaaaaagct tttaatntag tagtgactgt aatgttattt caaagaagaa 240  
tgaaagaacc tagagttttc atcacctca ccaatccatc ccaccctaga tttttgggtc 300  
atttcttcan agatctcaa aattcttttag aaagagtcaa cctccctcct tctacatctt 360  
caaccctctc acacaacctt atgttcacca cttatagctc ctccactttg gaatttata 419

<210> 3711  
<211> 333  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3711

agcttgacan aattatggac aattgtcttg ccttcagggg ttataatgct ctcgggatga 60  
aactgaactc cctggtgaaa aaaaaaatca atatgtgaag agaagagaag ggagacaaag 120  
tgcaagttca aagataataa taataacaat aacaacagaa aaaaggcatg aacttcagat 180  
cagcagaatc ttttactgct aactangaat aaatgaggta aaagggttaa atttgattgt 240  
aaagcacctt cagcagtagc taagtttctt aatttttaaa cacagcataa aatataaaga 300  
ttttgcctg taaaagtata aacactaaaa aag 333

<210> 3712  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3712

ntgcgaaacg cttgtcgtg gagctgaccc atcaattgcc ctaactctct tagactgatg 60  
 atccctaggc tcttgacctt gacttgatag aacctttttt taagcaaagg catttgactt 120  
 gaccccatgt ttactaaag tgaaaaaaaaa cccagtgcga atcaaaactc cgacatctac 180  
 tatggtcttc catttttccc gcagtattga gtcaatggtt aggttggtga gatgttgccg 240  
 tcgtggttca attatattta atatgtatgc atttatggtt attttgtttg gtcaacataa 300  
 aaccaagtta gcataaataa tgaagtgttg tttctattcc cttatgatct tatttgtaa 360  
 acttttggtg tgtttatgtt ggcagttgaa caggatcaag aaaattgga 409

<210> 3713  
 <211> 383  
 <212> DNA  
 <213> Glycine max

<400> 3713

agcttgcttg tgggtcttct atggaggctg gatctttgag cttcaatgag gtccttcaat 60  
 ggtgattttc caccatggag atgcagtga agacaaagga gaagaggatga gaggaggcgc 120  
 catccactag ggaataaacc atagaagaag gagcttcacc accaagatga gccttgata 180  
 agaagcttgg agaggatgct tcaatggagg aaaagaaaga gggagagaaa gagagagggg 240  
 ggagcacaaa attgaaggaa gaaaaaggga gagaagttga actttgagtt gtgtctcaca 300  
 agactctcat tcataaagt tacaacaagt gttacacatg cttctattta tagactaggt 360  
 agcttccttg agaagctttc ttg 383

<210> 3714  
 <211> 391  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3714

tgctctanat ttacattgat gtttgatatt attggaggag gttgtatgcc atttttgttt 60

taagggtagc atttcttgggt aaaactaact ttccaaatgt ttgccttcgc aggaaatggc 120  
 cctgaggaag ctcgcctcaa agaggtccag gaaggacaag gcggccgaag gaactagtcc 180  
 cgctcctgag tatgacagtc accgcttttag gagcgtgta caccagcagc gctgcgaagc 240  
 catcaaggga tggtcgtttc tccgagagcg acgcgtccaa ctcagggacg acgagtatac 300  
 tgatttccag gaggaaatag ggcgcggcg gtggacatca ctggttactc ccatggccaa 360  
 gttcgatcca aaaatagtcc ttgagtttta t 391

<210> 3715  
 <211> 404  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3715

agctttccaag cttattgtga tgatgccaaa gactcaagtc aagaatcatg attcaagcaa 60  
 gtttcaagaa tcaaagagtc attcaatcaa gaatcaagat tcaagtgaag aatcaagaga 120  
 agactcaaga tatgcaagaa cctcaagaaa agcatcaaga taagtataaa aagaattttc 180  
 aaagaaaaga ttgaatagca caatttgtcc gaaataattt ttcaaagaaa aatcttttac 240  
 cagagttttt atggtaatcg attaccagat gcctaaaaac gttgtataac tattttacaa 300  
 agtagtaatc aattaccatg ggcattgtaat cgattaccaa tgttgttgaa ctttgaatnt 360  
 aagatttcaa gagtcacaac ttgtgataaa atattttcaa actt 404

<210> 3716  
 <211> 420  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3716

ntgagccaaa atcctgactc actatatacc ttgacccatt gtgagaatgc caatccttac 60  
 cctcgggaagc aaaaaaagaa tagaggggaa atttccgata aaagaaaaag agaaggaaaa 120  
 tttccaatga aagcaaaaaa gaaatgaagg aaaattcccc aatcaaagag tgggagaaag 180  
 caaaaaaagg aaaagaagga aaattcccca atcaaagagt gggagaaagc aaaaagaaaa 240  
 gaaaggaaaa ttcccaatca aagaatggga gaaagtaaaa aaggaagaag aagaaggaaa 300

gaaagctcct gatcaaggat cgaaagaaac cagaagaaat gtgcagagag gtctttggac 360  
cagacaatat ctgaacagta cagaattgtc accaaatgaa cgaataaaga aggaaagggg 420

<210> 3717  
<211> 262  
<212> DNA  
<213> Glycine max

<400> 3717

agcttcgggtt gttctatttc gagcatcttt atatgtgatg ttctgtatc ggacctcgt 60  
gtgataactt atgaccatta taatttctcg agagcttcg ctgttcaatt tcgagcgtct 120  
cgatatatta tgcgcccaa tgggacatct cggggaaggg ttatgaccat atcaatatca 180  
cgaaagcttt ggttggcaat ttctagcatc tcaattgtga tgttctgta tcggaccttc 240  
gtgtcataac ctatgaccat tt 262

<210> 3718  
<211> 377  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3718

ntctcccaag tcctaaatga catttcaagc tagtattatc tcactntaac ctccatttac 60  
cacagaattc agacttaacc ttccaactct caaagcctca ctctttttcc actcataaca 120  
ccacattctc actttccaac cctagggttaa ctctacattt catctctaac agttttccat 180  
gggcaatttc agcatacaaa catcacaaac atcatcacia aaccctaaaa cagaatgggt 240  
atgtctaact catccaaaca tggcaatttc aacaagcttt caacaagttt cttcacaaat 300  
aactatcatg aagcagaaaa ctagcaagac taccatcat atctncaaaa accccatacc 360  
cacgaaattt aagagag 377

<210> 3719  
<211> 366  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3719

agcttgatac atcatcacaa gtggtggtgt caagggtcct ttttatTTaa agagtgaagg 60  
 atattcagag aatggggaca agaaattcat cttacgcagc tgtgtaaaat gaaatgaaaa 120  
 aacgggttgt gttttgattt ttcacagaa cacanacct attttccac tcaactcttt 180  
 tctttcaaag gccaaaataa tgcactactc tcaactgatca ccatcaaact atgcttcttc 240  
 tctctttgac accaaccatc aaacctacat ctctcacctg cataatntggc caaccacaa 300  
 tttngggacc tctggcactc ntgtttgtat tgcttcacat cgtttgggat ctggtttgct 360  
 cacgtc 366

<210> 3720  
 <211> 406  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3720

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 atgatgacaa aggtgatgaa caaaaagctc anaagatcaa agaacaactc aagtgaatca 120  
 aagaacatct caagtgaatc aagaacaagt caagagttca agaatcaaga agaattcaag 180  
 attcaagact caagaagaaa gtctacaatc aagaatcaag attcaagatt caagatctca 240  
 agaatcaaga tcaagattca agaatgaaga aaagactcaa tcaagataag tattaataaag 300  
 ttttttcaaa actttgaata gcacatgagt ttttgacaaa acctttacca aagagttttt 360  
 actctctggt aatcgattac catattgtta taatcgatta ccagta 406

<210> 3721  
 <211> 366  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3721

agcttggtat tatgataaga gcatacctgt tgtttctag aagtccaaaa atacaagaca 60  
 ttttgttaat gaaataacca aaaactatca tattaaccaa atcaccacct ccaagctacc 120  
 ataaaaatta taaaaaattt cataccacta tatatatatc catgatctca accaatcttt 180  
 acataaccog taatcaagtc ttttgattan aaaaaaaaac ctaatacatt aatcatgtca 240



agaatggtgg aaccatatat tatattatta gatcgatcat atgtttcaag aaaatgtctg 300  
 agcctatcta ataatttctc ctaagaattc aatacacaaa cctggatgag cagaaagcta 360  
 tgacat 366

<210> 3722  
 <211> 407  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3722

tcgaagaaac ggataacaga ttgattntac tctgtaacta gacgacatct ccgactgata 60  
 ttgtggaccc tatttgcttc ttgatgcaat cctacccct aaggacattg aataaaagac 120  
 tccaagaaga ttggaccaga gagatgcaag agaagacctt aggattctca tgagccttag 180  
 ggtagatttc gggcccatgg gttaagtata agtccactta tctttgtaca tatcatatca 240  
 aggttttatt atttttgggc cttgtattta gggctctata gtgtaggtag ggtacccttg 300  
 aaatgtagga tttttcagcc cttgtatttt agggcacctt gactagttaa ttgtattagg 360  
 ggtagttctg taatttcaca tacattaagt gaatatttga tgtgtgt 407

<210> 3723  
 <211> 196  
 <212> DNA  
 <213> Glycine max  
 <400> 3723

acatggetca ttaactgatg ttagtagacc tcgtttgatc taacagttgg gactgttgaa 60  
 cctccaatcc atgttcgttg tagatggagc ttggcatgct tgtgaggagg gaaaggatgg 120  
 acaaactcgc acttggggaa gcattctata tggttcgttg tcgcatgcc aacgacgaatg 180  
 tgattctcta cctaaa 196

<210> 3724  
 <211> 391  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3724

ccttattata caagcttgcc taaggtgttt ctctttccta cccctaattg tatecttatg 60  
 gcatntctta ttctgctcag tatectagaa gtaattaac ctgttgcaat atgttaggag 120  
 ccatttcagc tgtttttggt tatacccttc aaattcttat ctgtattcag agctatgaat 180  
 ctgtaaattc tgttgcatgg tactcttttg gagcttttta ataacttatg tatacactgc 240  
 aggaaggtga tgtaattgct tategattga ttgagttaac agcatcttgg actccggaac 300  
 tttctctctt tatggtacat atcaagtctg cttttggatt acataattng aaaaaaatt 360  
 gcatcagaag tttaatacgt attacatcta t 391

<210> 3725  
 <211> 336  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3725

agctcgtgct tcacggataa catgatatct ctgacatgnt ttatgacatt gcctataatt 60  
 gaaagcaaga tgaccataat aacagccaca gacatattca atgactcaaa tgcataat 120  
 ccttttctat ggaagacttt caaatctccc attaatacaca ttttggtata tagcacgggt 180  
 caatggggac aggacatgta ttctttttgc cctcttctct catcacccac aagatatttt 240  
 aaattatgat tgtaaaacaa atagaatagt cgccattcaa taatatgctc taacgttttt 300  
 cgggggtgaca cctttgtgcc attattgaat actatg 336

<210> 3726  
 <211> 389  
 <212> DNA  
 <213> Glycine max  
 <400> 3726

ttgagctcga tgatgctgcc ccatagagcc cctcggatct tgtttctacc caattcttct 60  
 gtttggggcc tctttgtttc cgcctccaat gcttcgggtca tggatcatgtt gacatccctt 120  
 atctcgtcac actcttttct gaccttagtg actgccatct ttagtctttc ttttaaccact 180  
 cttgtttttc aagctctact ttcaaggctt gcaccttctc gctctctca gggacttcag 240  
 cttcttcccc acttggacct ttcagctttg ggagccaagt tatctcttgc gtcttaacct 300

tcaaccactt atgatagccg ccgacgacac cgttgttgc tccactaagc tccttatctt 360  
 tttgttcac tgtattccat gcctttcgg 389

<210> 3727  
 <211> 411  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3727

agcttgtagg attatgngt acccatcata tgtggtacta ggtggcggtc gggcgatggt 60  
 gcacaacaag ttttccacat ccacaatgcg cgcataaacc caccatcccc tgttgcccac 120  
 ctccaactga gctcacgtac tcccacgtag cccatattct cttttctctc aacaccgggt 180  
 ccccatcaat cctcccaagc cttcccaaca tcaaagcaaa acaacattca aacagcacia 240  
 gctatcacag ccaagcaaaa cagagcaaaa gcagaaaact ctgccaaaac accaaccaga 300  
 tcacagcttt tctcacttag agaccccagt aacaattcct tcgatccaaa ttcgtaaccg 360  
 ttggatcgac tccaaaattt tactggaagt ctatagtga taagcctaca t 411

<210> 3728  
 <211> 425  
 <212> DNA  
 <213> Glycine max  
 <400> 3728

taacatgctt agaaatcaag tgatcatgta ttccgaaatt tagggggaga aaacggatgc 60  
 acattttatc tatatacaat tgttgttgc ttgcttgaat cttgatttca ggtattgtat 120  
 tgtcatcatc aaaaaggggg agattgtaga tgcaattgac tttgatgttt tgatgatgat 180  
 catgatgatg tgttgcaatt gatgcaaatg ggcttttcaa gattaaaatt caagacaata 240  
 cttcaagatt acaaggcaca acatcaagat gatcactaga atattaggaa gggaattcct 300  
 aattgaatta gcaaagggtt ggccaagtga tttaaaataa aaagtgtttt tcaaagggtt 360  
 tactctctgg taatcgatta ccagaggatg taatcgatta ccagtggcca aatacgtttt 420  
 ataac 425

<210> 3729  
 <211> 406

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3729

agcttgagct tcagctgcta tntatctaatt ttaatgtaca tcttgtaaga ataatatgat 60  
 atatgtcaca gcttacaaac attgatgtaa cattaataaaa taaatcaagt aactagaata 120  
 tgtgaacagt tctagataag ggaatatcag cacaacaaca acaaacataa caaaaaggat 180  
 aaaaaacata tgaaaagaaa gaggaggaaa gaagagaata acagttgact actacaatat 240  
 ccttataggt attaaaaata tttgcaataa catgacaaag gaattgcttc tcttaacatt 300  
 gtctaanaaa aactaacatg ataccatgga gtaacaaagt tcagatagag gtttcttcat 360  
 ttaatacagc tcacttcana atagactttt tatttncatt tacttt 406

<210> 3730  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<400> 3730  
 actcagctta cagatccgat catggaagga tttggcaact gccttcatta ggcagtagca 60  
 gtacaatacg gatatggctc ccgatcggaa ccagcttcag agtatgacta agcgagagca 120  
 tgagtccatt aaggaatatg cccaaagatg gagagatctc gcagcccaag tcgtaccgcc 180  
 catgacggag agggaaatga tcacaattat ggtagatacg ttaccacagt tctaatatga 240  
 aaagctgata ggctacatgc cagctaactt tatggatctc gtcttcgccg gagaaaggat 300  
 tgaatccgga ctacggaaag gcaagttcga atatgcttcc aatgtggccc ccaacaacaa 360  
 cagaagagcc ctagtagtgg gtgcgaggaa aaaggaagga gacatccacg cggtcaccac 420  
 cgccccgatg tggatg 436

<210> 3731  
 <211> 419  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3731

gctcgtgaac gattgttaatt tcanattagt cgtataagta tatgtgggtg tactaggaac 60

gcgggaagca ccctaaatat tgatttgtag gtgccatttg ctaatgagga gcatgaaaac 120  
 tttattgtgg atttcatggt tcaaaattta tggcttcctt gcctcttcat cgtcatcttg 180  
 tctttggtga tgctcataag aaatgtggga aatttggtgc atgttaataa attctgtcat 240  
 tcgattgttc gagacgcgct gtaccgcagt agtaattatg tctcccatat caatgtcttt 300  
 tgagtgcatt tgatttggtta gaaaatgtat gactaggtat acttatttcg caaaaaata 360  
 cttattttat tgtttgacag tttgttcagt gatatttctt aatcttgaaa atttttctc 419

<210> 3732  
 <211> 429  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3732

taagcttggt agtgtctttt ctttcttnt cttctggagt tgagcttaag ccctaaagcc 60  
 aaaacattgt cagagtcttt tcttcatttt tcttttaggg ttgagcttaa gccacaaagc 120  
 ttaagccttg gatgccaat ttcttcattt ttcttttctt gagcttaagt tatagatctt 180  
 aagccttggt agcacatttt cttcattttt cttctaggat taagcttaag tcttgtcaag 240  
 gtattttctt aatttttctt cttgggtcaa gcttaagcct tgtaagccta ttttcttcac 300  
 tattcttcaa ggagatagct taggctatag agcttaagcc ttgtcaaat cttttcttca 360  
 ttattgttct aggggtcaagc ttaaacggca aagcttaagc cttggaagtg gtggttcttt 420  
 atttttctt 429

<210> 3733  
 <211> 374  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3733

agctttgcgg atttgtactt cgccagtgtg atgatcaaag tgggtctgaa aagaggcaaa 60  
 tttggtcatc ctgctttgat aaaaactggg gcaaatgaag aggatgagaa tgaggagaa 120  
 acccatgttg tggttgccat tcttatatgg ccaagtttcc caccaacca acaatgtcat 180  
 tactcaacca ataacaacc atctccttac ccaccacca attatccata aaggccatcc 240

ctaaatcaaaa ccacaaaacc cacctaccaa tgctaaacac cacctttagc ataaaccana 300  
 acacccgccca atatatgagt tttgcagcga anaaaacctt gangattcac ccaaaatccg 360  
 gtgtctatgc tgac 374

<210> 3734  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3734

tctaaacatt ntgattntca naatttataa tgaagagtca catctgttga tgtgtaaccg 60  
 actacacctt aatggtaatc gattaccagt gactgattta gaanaataaa tttccaaaag 120  
 tcacaattct tcaagtgact tgtttctgaa atttttttca aaagtcataa cttttttaag 180  
 tgactagttt taaagaaact gccaaagagtc acaaactttg acttgagtca tcaagagatt 240  
 ataaatatgt gaccatgaca tgaatttcat aattatcaat aatctattct tcaatctttt 300  
 ttcaacatca tctctcaaca tctttcaata tattctttca tctctttcaa cactttcaac 360  
 agaactttct aattcatttc tcttcatctt tcta 394

<210> 3735  
 <211> 255  
 <212> DNA  
 <213> Glycine max

<400> 3735

agcttggcat atatatatat atatatatat atatatatat atatatatat ttatatatat 60  
 tataacaaag agatcttcat ctatgaaact atgttacgtg acaatctcat attttttact 120  
 tttcaattaa acgcgatcca ttcaactatt tatcttaatt atcttatttt tcttcattaa 180  
 acgcacccgc gccgaatatt tagtttaatt gctttattct tctatgttaa aataaaaaaa 240  
 tacataataa ttatt 255

<210> 3736  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<400> 3736

gcttggcaca atgccactcc atttactatc cgagtatata gtggatcttg ggatgacaat 60  
ggcattttta tttacacaac attaaatcat ataaaatatt gcctcccca tggagatagt 120  
gggataatta aaacattgga tgtcccaatt tatattacaa aggttggttg aaacaccatc 180  
ttctgcttgg gtcgcatgg gaaaaacaaa gctataactg ttgatgcaac agaatatatc 240  
tttaagcttt tcttggtgaa gaaaaaatat gatcatgtaa tgaacatgat aaagaattcg 300  
cagctttgtg ggcaggctat gattgcttat ctacaacaga aagggtttcc tgaagttgog 360  
ctccattctg tgaaagatga gagaat 386

<210> 3737

<211> 416

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3737

agcttgagca actctaatag gggaaattct ccttctccaa ccattctttc cttcctttct 60  
tttatccatc tcatcccttc ttctatctac attagcccta aagtgtaaag cctctcatga 120  
taatgagagg ctaaaccccc attggttgga gtctggcaga ccaacttttg taatgtagct 180  
ttttcttatt atttatttaa tacaatccaa tttctgttgc tcttttctgt gcttatttgt 240  
ttattgatta ttgtatgatc atccatgttc atgtagtgt tagaggataa tgctttgaan 300  
aatgggttatt ttctaagaaa taggaaaaga catctaaatg aaatcattgc tagaaataaa 360  
tngatatttg tttatcctat tttatgcata tctaacttta atgcaattta ttggtt 416

<210> 3738

<211> 417

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3738

tcaagaaaaa gatggcctca gctnattcct tatttccata agggaattct atcaatagac 60  
ctccaatctt taatggagag ggttaccact actggaaaac ccgaatgcaa atttttatcg 120  
aggcaataga tctaaatatc tgggaagcca ttgaaatagg gccttatata ccaccacag 180

tagaaagagt ttcaatagat ggtagttcat caagtgaag cataaccata gaaaaaccta 240  
gagatagatg gtctgaagag gatagaaaac gagtacaata caacctaaaa gccaaaaaca 300  
taataacatc tgccctagga atggatgaat atttcagagt ttcaaattgc aagagtgcta 360  
aggaaatgtg ggacactctt cgattaacac atgaaggaac tacagatggt aaaagat 417

<210> 3739  
<211> 402  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3739

agcnttgatg atatggtctt caccgactaa aggatcaatg tgggtctaaa taaaggcaaa 60  
tttagtcatc ctacttagac gaatgagaaa actggggcaa aagaagaggg tgaggatgaa 120  
ggagaagccc gtgctgtgac tgccattcca atacagccaa gtttcccacc aacccaacaa 180  
tgtcattact cagccaataa caaaccttct ccttaccac cgcccagtta tccacgaagg 240  
ccatccctaa aatcaaccac aaagcctacc taccgcactt ccaatgacaa acaccacctt 300  
tagtgtaaac caaaacacca accaagaaat gaattttgca gcgagaaagc cttagaattc 360  
acccaattc cagtgtccta tgctaacttg gtcctatc ta 402

<210> 3740  
<211> 413  
<212> DNA  
<213> Glycine max  
<400> 3740

tgtaatcgat tacacacata ctgtaatcga ttaccagagc acattttcaa aaaatattct 60  
caacagtcac atctttttat gtggttcttg aatggctatc aaaggcctat atatatatgt 120  
gacttgagac acgaatttaa gaagagtttt tggagaacaa aaaggtctta tctattaaa 180  
aagcaaatcg tgttatctc ttacaaattc cttggccaaa ttacttgtga ttcaataagg 240  
aattatttga gtgctcaaat tgttcagtct atctctttca agagagattt cttcttttct 300  
tcttcttcat tctgaaaagg gattaagaga ccgagggctc cctgttgtga aagaattcta 360  
aacacaaagg aagggttgtc cttgtgtgtt tagaaccttg taaaggaatt tac 413



<210> 3741  
 <211> 355  
 <212> DNA  
 <213> Glycine max

<400> 3741

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 ctaaggacaa gcacaaaaga tacacaacat cattacatat tttatttctg aaaattatct 120  
 acctactcac ctatgtgatg ataataataa taataaatat agcacaaatc aagggttgatt 180  
 taatgatatt tttcaatatt gtaatgttaa cctaaaactg aagttaatcg atcacataaa 240  
 taaatgtcgt cgtattttaga aaagaaaaac agaaaaaagg gaaggtggag tataacctgc 300  
 agtgagtcca tggataagga attttggtga cattgacatg taatgccttt tggac 355

<210> 3742  
 <211> 408  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3742

tatgaccaat ttgatctcca actntgagct cctcattgtc catgaagggtg ataattccct 60  
 tccggcacac agaatcatag agtttacaag taaaagtgtg atgggtatca tctctcctaa 120  
 aactaaggaa tacgtcatgg gtacactntg tttcagacac tgtaccatca tttgccatga 180  
 ttgtattgta gtagcactgc aagtagagta gtgggactat gagctttctt tcaactgaatg 240  
 aatgactcgc atcacaaatc tctacaact tatatcagga atttaaaca atactaatat 300  
 actttgttat ttttacatca tattattata tattctatct tttatttgaa tatatttatt 360  
 atcatntct ctcgggtct ctccaatagc cactgtggcc ccttggat 408

<210> 3743  
 <211> 369  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3743

agctttacca ttgaattcag caccttatgt catattagat ggaaattggg tatcttaaca 60  
 taagagaatt cagatggact ttaatcctaa ttccacaagc gaccttttca cgagatctct 120

acttaaccct ttgggtacat gatcagccac attatgctga gttctcacia actccactga 180  
 tatcacacca tgcattgatta actcccgaac catgttgtgt ctaacaccca agtgtctaga 240  
 ctttccatta taaactggac tatatgcctt agccaaagnt aatatgggggt aaccttattc 300  
 cttttggtag gaattcagtt taacatgtaa caggctgcca acatagcctc accccaaaaa 360  
 ccttcactt 369

<210> 3744  
 <211> 407  
 <212> DNA  
 <213> Glycine max

<400> 3744  
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 atgagtcatt aggacaatga gttatgatca aatcatgaag aagtgagaga ctctagtaag 120  
 catgttctac aatatataga aatggatttc aaattcttac aattagaaat tctaagactt 180  
 ttaagcacag agaaacaacc taagggtgaag gaagtcagtg aataacatct attaaatatt 240  
 gtcaaattct ttaatgatgt gtaattgtgt aaggattcat aaggtaggaa ctccaatttc 300  
 tcacaattaa gtagagtaag agattgcaat gcattcagca gaccatctct taaggatgct 360  
 agggaattag tgccagagat agttaagtct aggatgaaat tgggtgga 407

<210> 3745  
 <211> 362  
 <212> DNA  
 <213> Glycine max

<400> 3745  
 ctcatgtgtt ctagtctttg atggcatagg gatgaattgt tgacatgcct cagtaactgc 60  
 taccatatcc tcactgcaa tcatgtaaag agatcctcgc ttttttccac gagccacaat 120  
 gagattgcct tttgttacct ttcaagctct atatccaaaa gtgggtgtaat gcccttcatt 180  
 atccaactac cctatagatg ttagatttcc ctttaaggca agaatatgtc aaacattgta 240  
 cagtgtccat agggatccac tagaggctct gatgtcaata tcacctcttc cgacaatgtc 300  
 aagagatttt catctgcaag gtaaactttc caaaccttcc aaaatatagt tagataaaaa 360  
 tc 362

<210> 3746  
 <211> 455  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3746

gtgaccttag aatcctcaag cttegagaat tgcccaaact cctctccat ttctgatttt 60  
 atgcttaaat aggtggcctt gttggtgctt gtgcgcctag cgcaactatg gctcgcttag 120  
 cgtgcattag tgaatttcag cttagcgcgc gtcttttcac tcagtggatg gactcaagtg 180  
 gtgtgcttag cgggattagc cctcgctcgg aaaacattta cagcttatcc ttcttcaga 240  
 ttcttcctcg cgctcagccg caagagtggg gcgctcagcg gatggctcga taagccagca 300  
 gattggetta gcgagcggat gaaaatcagc acttcacaaa cttgcctaata taacctgaaa 360  
 ttgagaggaa atgattatta aacacacaaa atgggagtag taagtattta ttacctatct 420  
 ttaacanana gtaattacaa cattacaaaa taacc 455

<210> 3747  
 <211> 408  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3747

agcttgaaca atagaagagc ttcccncttt cctcgaaact ctaaatgccc aatattgcac 60  
 ttgtcttcaa actcttcag agcttcccaa attgcttaaa actttaaatg tcaaagaatg 120  
 caaatcgctt cagagtctac cagagctttc cccgctgcta gaaattctaa atgcaagaga 180  
 ctgcgaatca ttgatgactg tattgtttcc ttcaacggcg gttgaacaat taaaggaaaa 240  
 taggacacag gttatgttct ggaattgctt gaacttggat gaacattctc tagtggctat 300  
 tgggttgaat gcacaaatca acatgatgaa attcgcanac caccacctat ctacacacaa 360  
 tcgtgagcat tgtgaaaatt acaatgattc ttttcaagtt gtttacat 408

<210> 3748  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations.  
<400> 3748

tgtcaaggta ggaaaaaagg acagtgcattg tcatattgtc cgacccatca agcatattca 60  
caatctgcaa caggaaaagg acggcaatga aggaagaaaa agactaatct acattatggt 120  
ttcagtgtca ctcaacaagga cataagaata acatttgatg caaatttaaa agaaatcata 180  
aacaataaat ttgatgaagt gcatatctta tagaaaacag ttaagaaata acaataacca 240  
aatgaggcat tttttggttg tgcttttttg gtgtctgttg attatgctgg agcataattc 300  
taaaactttt agccataaaa gtacccttct ccacctttta tgagacaggc ttgtttcctt 360  
agcttcctta tngtggtttg catattggat ttttttagtt ttcaaagggt ggccatgcaa 420  
taggactata ttgt 434

<210> 3749  
<211> 391  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3749

agctntggag aaccaagcca atcagaatgc tagacgaaat atagatggga atagaggtaa 60  
caatggcggt aatgacggac cgaggcagaa ccgggttgag ggagtaaagc tcaatgttcc 120  
tcccttcaaa ggtagaagtg atccagatgc ctacctggac tgggaaatga agactgagca 180  
cgtatttgcc tgcaatgact aactgatgc gcagaaagtc aagctagcag cagctgaatt 240  
ctccgactat gcccttggtt ggtggcataa ataccaaaga gaaatgttga gagaggaacg 300  
gcgagaggta gatacatgga ctgagatgaa aagggtgatg agaaaaaggt atgtgcccac 360  
tagctataac aaaaccatgc gacagaaact t 391

<210> 3750  
<211> 431  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3750

ntgatggtgt tgagaaaaaa tcacatgttt gtcacatca aaaaggggga gaatgtgaat 60

gtatgtatac atgattttga tga	tgatgtcaaa agaagaatca aacaaggctc	attttgcttc	120
aagattaata caagattggt	tcaacaaaca aatccttgat tcaatatttc	ttcaagatca	180
agccttgcc	caaaatgcag agattttcaag tcatccaagg	cacatgtaat cgattaccaa	240
tggtaatcga ttaccaaggc	acatgaaagt gtgtaatcga ttacacatca	tatgtaatcg	300
attaccagag actctgaacg	ttgggaattc aaattataac tgtgtaatcg	attacacaaa	360
cattgtaatc gattaccagt	ggaaagtttt cagaaaatct gccaacagtc	acatcttttc	420
attagatttg t			431

<210>	3751
<211>	405
<212>	DNA
<213>	Glycine max

agcttgagaa	ttgtaaagga	ctacttaata	gcatgaaata	cgtcttagaa	gggaggattt	60
tctaagacgg	ttatgatgat	gaaaccatct	taaaataact	ctcattctaa	gaggggttatc	120
taatcaaaat	catcgttgaa	aaggactcat	tctaggctct	ctgtgctttt	tttttttttt	180
tttttttatg	ttttagacct	agtaattgtc	ttagaatggg	agctattcta	agatgatttc	240
gttgtcatag	tcgtcttatg	tagcaccctt	attttttgta	aaataaatta	aaacattttt	300
ttttaaaaaat	aaatagggtt	taggaaaata	atgagggtttt	tgtaattaaa	taaataagga	360
ggaataattt	tattaattaa	ataatgggtt	taagggtgaat	aaaat		405

tgtccaaaac	taggtaaaga	tgttcagggt	ccagaatcta	attaattaag	tcgatgcaa	60
gattagataa	cactataaca	atcatgaagc	tctcataata	aaattacctc	ttttatttat	120
ggcagatact	ttactatcaa	gcaaacaaga	taaataaaat	tagaaagata	cccaagaaag	180
atgaagaaac	acttgagaat	tttcgttcta	gtaactaatt	tgttataaga	tttgactgc	240
tagatcctca	aacaaccaat	ctttccagaa	aatcattaa	tgatttacca	ttcttattta	300

aaaaatatta aggttaactt ttatgaacca taatcatgga tcatgttatt tgaacaaaa 360  
 ttataccat catcaagaag gagaatgata ctttaataat gatacttcaa attgtaccat 420  
 caaaag 426

<210> 3753  
 <211> 328  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3753

gagcccgagt agtcgaagat atgnttaagt ccatagccat canagtctga aaagagtatg 60  
 atgaactaag ggacgtctat atggccaccg ttgaagcctt ggaacgagaa accaagaagg 120  
 cccgaaagga ataacacgtg ccagcaaagt tttgaggggc tttatagggc agcaatagta 180  
 agctcaagct ccgaaaaggt gaaaggaatc atcacgggtc aaaggcatga tcttgaagga 240  
 tgagctaaag gcttacctta ggtcgaaaag aaatttgtcc caacaagtaa gcgagactga 300  
 agggaatatg tgggccgtca tcatgag 328

<210> 3754  
 <211> 425  
 <212> DNA  
 <213> Glycine max

<400> 3754

tttatctcta tatatttttt tattctttta ggaatccata taatagccat atgatatacg 60  
 agttcttgtt attcaattat ttgttttcta agaaatccga ctcaatacga attttctgag 120  
 acttcattca cttcaattta ctaccacaaa ttgcctcatg tacctacaac aattctttta 180  
 cctgtattga aaaatagggg tatggcaaaa aaattagagc aattgtcttc cactgagtgg 240  
 gcataagctt agcaagatga agtagctttt taccctcttc tcttgtccac ccaatctata 300  
 cacaaaaagc atcagattga aaaatcactc attagaaaaa tatcacaaca attaataaca 360  
 tagttggtac atactcctta tcaataacat cttaaaaaaa gagaggctct taaacccaaa 420  
 gaaag 425

<210> 3755  
 <211> 415

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3755

ntggngctgg naaactatat aacttcacca aggttctagt ttaggctctc tcttctctct 60  
ctccctgtgt cattctgctt taggcttttc ttcttttaga cactatttca ttttgcaatt 120  
ccaattttta cttttcgttt cagcaataaa actccattct tcaatctata attccggctc 180  
ctattgatta atggaaggct aagtcctcaa cgatgttttc tcttgaggat caagcacagt 240  
tctctttgag gttctattat tactggtaat ttatgttcat gcttaatgat cgctcatgat 300  
taattggtgt atgtgttgct taatcacata atgaatgcct tatgttagat tttgcttagt 360  
aattcaattt aaggttggac taagtgggtg aaatgataaa ggataaactc tcgta 415

<210> 3756  
<211> 357  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3756

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acatgtaaat aatagatact gaaattcgaa tcaaactaaa ataaaacaac ttaattcgat 120  
tttaaacacc tgccatctaa acgtggaata atgggttgct aagtcctca gtaacacctg 180  
ccatcctaatt tacgttttat ttggtgaata attccttctt ataaccatgc tctattattt 240  
tccacgagtg tacagtgtcc caacttcagc ttgttaggaa tctgagatct accacanagg 300  
agcatcaatt atacaaaata aattattcgt tttctacaat tcacccctcc ttatgct 357

<210> 3757  
<211> 414  
<212> DNA  
<213> Glycine max

<400> 3757

tgtgcttaac gtagaatttc caattatatt ttataatatt aattgcaact ccaataaaaa 60  
caatttaact atatattatt attaacgtaa tttctatttc tactactctt aaaaacaatt 120  
tcactatata ttgttataaa tcatgtggat acattttgtc acaatctaaa catgtcagtc 180

gcatcaatTT ttctttttcc catataaccc cagaatttca agagttagtc aacttgaatc 240  
 tcctattata gaggcatttt cattcacaca ccccaaattg ttggaaaaat aaaataaaca 300  
 ataagcaaga aaaacacaca cgtgcttttc tcctaataat cacctcaagc tacgtatgag 360  
 caaccagtga ggggatatcc ccaatatgct ccacaataaa gaaacatgtg acat 414

<210> 3758  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<400> 3758

agcttatcgg tcacatgact aacaacatat tacaacaac caggtaatga aggaggttct 60  
 ctgttaggga gtaaaaaagt tgacatcggc attttgaatt taatatcatc cttaatgttt 120  
 ccttgattgt agacaccaat tagagtccag cctataatTT ccatggaaat gttgtgggcc 180  
 cacattgctt ctacagaact tgggtgcagga catttcaact cgaataaaaat ctcagcttca 240  
 ttccattcgt gctctgaaaa tattccctcc gctttgcatt ctagatcaca ccagagtatc 300  
 gggTcccatg ttctaaatat gtaattacat gaagaactaa atcgcatagt gccattgatg 360  
 agtacgctga acttcataat caacaccatt ttcatgacac ttttcaatct 410

<210> 3759  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3759

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 agacatatga ttgatttctg atctgctcaa gtttgagatt tctttctttc tttctttttt 120  
 ttgcttgaat tatgagtaac ctacaagctt ggtccaatca tgcaactaat ttttggtctca 180  
 tcaatcttta agcttgaccc ttttcagaaa cctttgcgaa tgattaacct tttggttgct 240  
 acttttcatc caacctatTT gaatgtgacc tatatatgta tgcattggag gtttccaact 300  
 ntttaagata gaaatgtatc tgaaatctct aaatacatga gctgcagaag aggaaaatAt 360  
 gctgaanaat cttgtattgt gaatacctga cttt 394



<210> 3760  
 <211> 399  
 <212> DNA  
 <213> Glycine max

<400> 3760

agcttggttc aaggtactta ccggttgaag atcgaagaac gatgaagaac gaatgaagaa 60  
 cgtcgaagaa cggtcgaaaa ccttcgcgaa attcctcacg gaaaacgtta cggaaacgtt 120  
 tcggaagcgc ctcggcttat atttttcttca cggaaacaat tttccaagc aaattcgaaa 180  
 gagagataag tgcctaaggg gctgaaccct tttccttctc acttcctccc ctatttatag 240  
 caaaataggg gagatgcttg ctgcccagct cgcccaggcg agcagggttg cttcctccag 300  
 aagcaacagc cttctggagg aatcttcttg agggcccaag tgggcctggg tgctatttgc 360  
 actcccatth ttactaagta cccccctct gctttttt 399

<210> 3761  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<400> 3761

attcgattca ttctatgtac ccgtagtggt ccacattgtg tctcgtgcat tattattctc 60  
 gttttgttta ctttttatac ccctgttga cgcgcttaag ccattttact taagccattt 120  
 ctcgcttaac ttaaaaataa aataaatttc caccgaacgt ttgaattgta ttatccatta 180  
 acttcgttta aaatatattc cgaccgttcg gtcgtgccgt aaccacgttg gaaatcaaaa 240  
 agaggtaaaa aataatataa taatcaagaa gacatctttt agtaaaataa agcggaaaat 300  
 caatcggacg ttatctcttt gggatgtctc attcttaatc gaattgatta ataactaaag 360  
 tgaaactaga ggctaacatc aattcggcta gtcaagctcg tacataaaat aggcttt 417

<210> 3762  
 <211> 415  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3762

agctntacta tgtaatgaat aaccaaggta aattccttca tctgacttgg catcaaattc 60



ttaaaaataa atagcgctta agaaaaataat gatgtttttg taattaaata aataaggagg 360  
aatatatatta ttaattaaat aatgggttta ag 392

<210> 3765  
<211> 366  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3765

tgtccaaaac taggtaaaga tgttcagggt ccagaatcca attaattaag tcgatgcaaa 60  
gattagataa cactataaca atcatgaagc tctcatagta aaattacctc ttttatttat 120  
ggcagatact ttactatcga gctaacatga taaataaaat tagaaagata cccaagaaaag 180  
atgaagaaac acttgagaat tttcgatcta gtaactaatt tgttataaga tttgcactgc 240  
tagatcctga aacaaccaat ctttccagaa aaatcattaa tgatttacca ttcttatcta 300  
aaanaaatta agggtaactt ttatgaacca taatcatgga tcatgttatt tgaacaaaaa 360  
cttata 366

<210> 3766  
<211> 367  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3766

ctataattca tgggcataaa tttatcatcc tatgtctaac aatgatttca atatgatatc 60  
ctttcttttt ggtctaataa aaggtatcct cttggcagcg gataacccat aaaactgata 120  
catgcacatt ttctttatat ttctaccttc ctaagacaat ctttatecta gcccctcccc 180  
aaattagggg tctattttga ataaaacacc ttatgttgtc ttaaaaccct aaaaccaggg 240  
tcaaaatatc agaaataagg tcagggattt tataaaaaat aataataatg ttgctcacia 300  
ggtgcaggga taattttcac caaggctggc tcttggttaa gtggataaat aaaaagaaac 360  
atggctn 367

<210> 3767  
<211> 405  
<212> DNA

<213> Glycine max

<400> 3767

tggggcattg aggaaggggtt ttggaagaaa gaaggagata ggaatgggtg ttttccaagg 60  
ctacacgaaa aataagactt gaaacactca agtgtttcta ctctcaggaa aagaagcttt 120  
tctcacacac caaaagacat attgtagatc gtaacgatca ggtagtagaa atctgtccta 180  
tgaacctcca gaccaaattt cgagaagatc taacaattaa cgattgcaga agggcgcttt 240  
taccaaggta gtttcaggta gtttcttga gaagcttttc tcgagaggct tcttgataa 300  
gtttctctgt gaggttctt tgagaagcta gagttttaac taccacacc cttataataa 360  
ctaaattcac ctcttgaaa taaaacatgg ataaaacaac acaat 405

<210> 3768

<211> 344

<212> DNA

<213> Glycine max

<400> 3768

agctcgtata gttccccaat ttatgggttat tttggagtaa attttgtaaa taaatcttgt 60  
tttatgggta acgatgtctt tagaaaattt ccattggatc taatgaagaa atctgtgcat 120  
tttcagggtga aaaagaggct aagttttgaa ttgcaaatg tagcaattgc gctaagctca 180  
gcagttgggc taagcgcagc ttcagcgcgc ttagtgcaaa ggagaatctg gcagagcatc 240  
agaattaaag ttgtgcgcta agcacgagat ctgtgcgctg agcgcagcag gtgccttcaa 300  
ccaggctaag ctcgagacta gcgctaagcc caatttctact tact 344

<210> 3769

<211> 425

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3769

gcttctgatg aatcaagatt gattcanaga agttttgatg ataacaagg tgatgacaaa 60  
nagctcaaat atcaagaaca cttcatgata acaaagatga tgatctcaag aatcaaagaa 120  
tgaattcaag attgaatcaa gaacacttca aggttcaaga ggaaatttga tttcaagaat 180  
ccaagaatta agatcaagat tcaagacaca agattcaaga atcaagagaa gaattaatca 240

agataagtat taaaaagttt ttcaaaaac tgagtagcac atgaattttt ctcataacct 300  
 ttaccaaag agtttttact ctctggtaat cgattactag attattgtaa tgcattacca 360  
 gtagcaaaat ggttttcaaa aaacctttca actgaattta caacgttcca attgatttca 420  
 aaatg 425

<210> 3770  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<400> 3770

tcttaagcac ctgcggcatg caactatacc ttatcggaat tggaaaagat ttaatgtaag 60  
 tcaagagcat gatagtgtgt cgataccatt aactggtcac aggttcttaa gcaggccgag 120  
 ggcacataa ttgtatttgg aaagacccaa gagaaggaaa aaactaaaac ttccatatgg 180  
 aagaagaggt cgatattgtt tgatcttcca tactggtagt atctagatgt cagacattgt 240  
 attgatgtta tgcattgtga gaaaaatgtg tgtgatagtg tcattagcac acttggtaac 300  
 attcaaagaa agacaaagga tggtttgaat actcaccagg atctagttaa gataggata 360  
 cgagaccag tacattcaag gtctgatggg aacaaaatat acttgccttc 410

<210> 3771  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3771

tcttacatag tccgcctttg cttgaccttc tttatgctta anaacagaaa cattatgcat 60  
 aggcaaaaga tcaagaggag ttagtgggtt aaaaccataa acaacttcaa aaggagaaca 120  
 attagtggca ttatgaacaa ctctattgta agcaaattca acatggggta aacaagcttc 180  
 ccaagttttt aagttcttcc tcaaaactgt tctaagcaaa gttcccaaag ttctattaac 240  
 aacttttgtt tgcccatcgg tttgtggctg acaagtgggt gaaaataaca atttagtgcc 300  
 caacttgctc cacaaagtcc tccaaaaatg gcttaagaac ttagagtccc tatcactaac 360  
 aatgctcctt ggcaaaccat ggagtctcac aatctcctgt tggatcaagt 410

<210> 3772  
 <211> 425  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3772

agcttgatgt gagaaagcgt ggaagagtta gtcttcctac tttngtttgt tgaccacaaa 60  
 gcggtacctg gagatatgtc gcgggggctg tcaggtgggg tgctattgcc caaaaccaag 120  
 cttgaccaat cccgacccaa cccgggcata gtcagtcagt gagaacctgt gacgtacct 180  
 aacaggcgag ctcttgccag tcaaccaata aaagaacaaa gaccacaaag caaggaggct 240  
 tgtgtggcgg ctggccagct atggatcttg agtggatatct agaaattggc ctctggtaat 300  
 cgattaccaa ggggtgtgtaa tcgattacaa gacttaaaaa tggagacagg aagttaagat 360  
 ggcctctggt aatcgattac caaggggtgt aatcaattac aaggcttaga aatggngaca 420  
 ggatg 425

<210> 3773  
 <211> 427  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3773

tcagacctaa gcaacacana atctaggtat ccaaaatccc tcaatttaat ggattttcaa 60  
 ggtttgagaa gtgaaattga gaatgaagta aatttggagc aaactctcac ctacacaaag 120  
 tctataacat caatttaaac ttgctcaaac tggatttaca cctaaaattc caccgaatca 180  
 aaatttgact catcaacacc caattttacc ctagaaatgg ctctttgttc actttggta 240  
 tttgtttttc tctcttgac agcccaagct ttctcataag tcctaaatga catttcaaac 300  
 taggattaac tcactttaac ctcaaatac cactaaatcc agatttgacc ttccaactct 360  
 caaaaactca ctctttttcc actcataaca ccatattctc actttctaac cctatgttaa 420  
 ctctacc 427

<210> 3774  
 <211> 400  
 <212> DNA

<213> Glycine max

<400> 3774

acaaacccat gacgtaccaa tttgaacatt tcttgctcca taacattctt gatgaacggc 60  
tatttgacat ctataaaata tataatgcat tcttatatta attgcaacga aattcaaaat 120  
gaagagtaag aaaacaacaa ccaacaaaaa ctgcccggat agttcaatct tgcagaagaa 180  
aaaaaaaagg ttttataagc aaatggtttc attgtcagcg gtgatctgac tgataagtga 240  
ggatggtaag gctgaaaaac tgtttcggca aagcagaatg gagactgctg agcatggaat 300  
tgaacaacat aagaaagggg gcatataatt gtcaaagggt gtagacaaaa tgctggagtt 360  
tcttcttgct tatatcattt caagatgaca ttaattagat 400

<210> 3775

<211> 388

<212> DNA

<213> Glycine max

<400> 3775

ttctctacca cttgtcatcc acaaactgat gggcttacag aggtagtgtg taggtcttta 60  
tccactcttt taagggctct tctaaaaggc aaccataagt cttgggatga gtatcttcct 120  
catgtagaat ttgcctacaa taggggcggt catagaacca ccaagcaatc cccttttgag 180  
gttgtctatg ggttcaatcc cttaacaccc ttagacctca ttcccctccc acttgacact 240  
tcttttatac ataaagaagg ggaatctagg tcagagtttg taaagaagtt gcatgagagg 300  
gttaagaccc aaatagagaa ccaaacaaag gtgtattcaa ctaagggcaa tagaggaaga 360  
aaggagctag ttcttaatga gggggact 388

<210> 3776

<211> 310

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3776

gtcacctgcg gctgcagctt ccgttattag tgcacagctc ttcaaaattg gcatatcttg 60  
gaatttgctt tattgcatcc aacagaggta tgtttacctc tacttttcta aacgtttcca 120  
agatctcttt ctctacctct tccattnttt tgntggaaac tgctcttgga gggaatggaa 180

gagggggaat gtgctgcttc tgcaaatcag aattacctgt ggaagaagat tcacctgcac 240  
 agaaattggt aggtaaatct ttgtcatcac cttntctgg aatagagtga agtttggcag 300  
 gttcatttgc 310

<210> 3777  
 <211> 380  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3777

ntgagcaaat tgaattgact attactttat acacggatgt ctggttgagt ccagtaatat 60  
 atcgagacgg tccaaattga aaatggaagc tcgtaggaaa ttcaaacgac aataactttt 120  
 tactcggatg tccgattgaa tcgggtaata tatcgacacg ctcaaaattg agactagaag 180  
 ctctgagcaa actgaaacga caataacttt atacatagat ttccgggtga gtcccgtaat 240  
 atatcgagat gtcctaaatt gaaaatggaa gctcttagaa aattctaacg acaataacat 300  
 tttactcgga tatccgacag agtctcgtaa tatatcaaga cactcgaaat tcagaacaga 360  
 agctctgaga atttcaaacg 380

<210> 3778  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3778

agcttggtga ggggtctctgt tagggcttct atttgtcggg acaacagctt gttctgagct 60  
 aaggttgcac cttgagtggg gagttctaga aggcttctct ttgttggtgc atatgtgcga 120  
 tcaggaagaa tggcgtgatc actagccgcc atgttttcta tgagttccat tgccctcctcc 180  
 ggtgtcttta gcttaatctt cctctctgcg gatgcaccca atatttgctt tgattgtggg 240  
 cgcaggccat ctatgaagat gtttagttgc accgattcac tgtaccatg tgtaggcac 300  
 tttctaagta gtccatggaa acggctcgagt gcctcgctga gggattcatt anngaaatga 360  
 tggaataaag agatttccat cttcccttta gcgggccttt gatt 404



<210> 3779  
 <211> 411  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3779

tctattgcag gaatttcacg ccacaccaac cggtaggtat ataggagtca cgaagacctt 60  
 agcaaggtta caagagaact tcacgtgcag ctcaattcat caggatgttc gcagattcat 120  
 cgaacaatgc ctcgattgtc aacataccaa ttatatcact aggaaaccag ttggactact 180  
 tgcacccttc cctctaccaa ctcgaccatg ggaagacttt tcaactcgatt tcattgttgg 240  
 ttaccatct tactgngggg atacaaccat attggtgggt gttgatagat tnttgaaggg 300  
 cattcatttg ggtcttcttc ttccacacta tactgcgtac caagtcgcaa acctcttctt 360  
 ggatattggt tctaaactgc acgacatgcc taagagccta gttntcgata g 411

<210> 3780  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<400> 3780

agcttcaaga aaaatggcct caacaaattc cttatttcca gaaggaaatt ctatcaatag 60  
 acctccaatc tttaatggag agggttacca ctactggaaa acccgatgc aaatttttat 120  
 tgaggcaata gacttaagta ttgggaagc catagaaata gggccttata taccaccac 180  
 agtggaaaga attacaatag atggtagcac atcaagtga agcataacaa tagaaaaacc 240  
 tagagataga tggtcagaag aggatagaag acgagtacaa tacaatttaa aagccaaaaa 300  
 cataataaca tcagccctag gtatggatga atatttcagg gtttcaaatt gtaagagtgc 360  
 taaggaaatg tgggacactc tacattaaca catg 394

<210> 3781  
 <211> 405  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3781

tctagccaaa tggacttacc ttgaattaat tcctttgata gcccttttga gccttgtttc 60

cctttccttg ttttgaagct cactacaagc cttaagtga aaaccatgat attaccatat 120  
 ccttaaggaa ttttggagct ttggaattgt tttgggaata agtgtggggg gtttttgttt 180  
 cattggacaa cttgttttgt tgactatgct tcatgatgta ttttgggtca tacttgatgt 240  
 acattgtata ttggttaa at gttggacatg ctgaatgaaa tgttgtttct caaaggtaaa 300  
 aaaaaaata aaaaaatcaa aataaaaaaa aaatcaaaaa aaaaaagaga gaanagcaat 360  
 aaagttgagt gaatatgac ttaaattggca caagaatgat gaaac 405

<210> 3782  
 <211> 420  
 <212> DNA  
 <213> Glycine max

<400> 3782

agcttctgca gctcttgat tgctacatgt gacagtatat caggtcgaat gctcaatgct 60  
 tgcccaagtt ttatgtatgc tggacccaaa gatgtcacia tttcacgtaa ctcaatagcc 120  
 ctagcaactt cattctggtt atggaaagag gacaaaagaa taaccaaaat gtaattctcaa 180  
 aatttgcatt tttgaacaaa gactatgaaa tataaagaaa ctgttactat tttcagagaa 240  
 gcttagatat ttatctatag tccatacata acaaaagctc aagccataag ctcttcagta 300  
 cagaactaga acaactctgt atacagccct atttagtcat tatttagata tataacacaa 360  
 atttacaata atacttacat aattcattaa tagtattgta atatagtcga tttatatatt 420

<210> 3783  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3783

tgccaaagtg aaggctcaag tttctgaagt caagggtggt atgatggaaa acattgaaaa 60  
 ggtaagacct atacaaaatg acattgtata gaggtcttta acagagtcga tgccatcatc 120  
 catcaaatat atagtactaa tttggattga aaatttacat tttctcgtag gttcttgatc 180  
 gtggagaaaa gattgagctg ctctgtgata agactgacaa ccttcgggtca cagggttcat 240  
 tttcttcttt attcttttag atatattttt aatctaattt acacgacttt gtgttcattt 300

tttttttatt tttttgttaa atattttctta cattatttaa atttttggtg ttagtatatg 360  
ctgacatcat tagntacttg gttttaattt ctatctcaac ttgttatgcg atgact 416

<210> 3784  
<211> 406  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3784

agcttgtagc cattataaga gaatgagcat gtgattagaa gtatgactga taatgttagt 60  
cagtttgtca aattgattgt gaaggaatgc attaatcata tcctggtgag agtgtgatcc 120  
ttaaattttg agagaaacga ctataattta gtactaattt ttgctgaat ctctaaagta 180  
tggaactaaat gtatgaaact gaggatgatg aaggccatgt ttaattgtga aagccacttg 240  
gccaaaaagt tgaccatgtg cttgaatgaa ttattccttg taccagttt gagctgaatg 300  
aattattgat tgattgaacc ctgagcctat acaatgttat ctccctacctt gacttangtn 360  
gcaggagagc atcatccaca ggaagcatgg ttcanagcaa atttgt 406

<210> 3785  
<211> 408  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3785

tttanatatg tatacactnt tagggatcac aaacttatta atactgacca gagatgaaag 60  
taaccctcaa tagcagtcaa ttcacacaac ataaccacaca ggacagaaga ttaagacatg 120  
gtgtgaagga acttaccgta ggtttgagca attctataat ttcttgagct tgccaaagcc 180  
ttatgtcaac aatattagca agtaaatacaa cctcaatcaa aatgtgggat tgctcattgn 240  
gatgtgcct ggtcttcttc ttaatttttt ctctctttac gattgaaagg ataataatct 300  
tagacattac acaagaataa tatatagatc aataaaaaata agcatcatat ttatttcaca 360  
ctttntaata ttagacctag aaaggtcata tcaggccttc attacctt 408

<210> 3786  
<211> 351  
<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3786

agcttaatct tctttatgaa tctttttaat gaagcttctc aaggaggtga gcttagttat 60  
gagaggggtg tgtgtatcta agctctagct tctcaaggaa gttttctcaa agaagcttct 120  
caaggaagtt ttctcaagaa agcttctcaa ggaagctacc tagtctataa atagaagcat 180  
gtgtaacact tgttgtaact ttgatgaatg aaagtcttgt gagacacaac tcaaagntca 240  
acttctctcc ctttttcttc cttcaatttc gngctccnc ctctctttct ctcccttttt 300  
cttttctcc attgaagcat cctctccaag cttcttatcc caagctcatc t 351

<210> 3787

<211> 439

<212> DNA

<213> Glycine max

<400> 3787

tgacactatg aaactcagct ttataggtga aatcaagtgc agccatttcc ctagagtcc 60  
tctcacgagg tggaggttgt gccatgttct cagaatgtgc aaaatcagaa tgctcaaaat 120  
tataatgctc aagatcagga tgttcaaaat caccaataac agaatgcaca gattcaccag 180  
ttatggaatg ctcagaatga tcaaaaggta taaatgatg cctaactaat ctatgaaatg 240  
tcctatctat ctcaggatca aaggtttgta agtcagatgg attgcctcta gtcatacact 300  
acattcagca tgcacacaac tagttgcctt gtcatgtaaa taaagggtgta ggtttgaact 360  
acagctaccc tcaaagata tccaaatgag ttgaaatttt gtgagcaacc ttataaaatg 420  
atgagaagat agcacaaaa 439

<210> 3788

<211> 313

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3788

agctttataa gtgcgggtct gggagactat tgtcaagtgt tcgcgatatg tgaagatgat 60  
gttccaagta cttcggattt ggtccgacca tgccctcctg atttccagct gggaaattgg 120

cgagtggagg aacgccccgg catttacgea acaagcataa tgtaaaccctt gacggtttta 180  
aaagctctat agttgggcct aggctttaga gttttcgttt tgtaaagct ntgtgtcttt 240  
tgtttttgaa tttataatac aaggatcttt ctttatctgt tcctgggctc tacccattct 300  
cattcatttg cat 313

<210> 3789  
<211> 411  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3789

tgcttctaca atctccccctt tntgatgatg acaaccctta aatcaagaaa tacatacaca 60  
ttctttttcc tagtcgatca ctcaactaat cctacatatt ctcccccttt gtttttgagt 120  
ttaagcttta cttggaatta agttatttaa ttatgtgagt tcttgattta atccctattt 180  
tctctcccc tttggcatca acaaaaagcc aaagtgcata acaaatataa aacatacata 240  
aatgactaat catacacaag acattcattg aaaaaatcta aaccaatcat gaagcaaaaa 300  
catgaataac ccanattcaa atataaacca catagtctta taacatagat catagatggt 360  
cagtcatact aagcaaatag taaaagaaat actaaatggt caaatgtcgt a 411

<210> 3790  
<211> 394  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3790

agcttgtccc agcgtttatg cgagacatat accaacaatgt tagctatcat cgccaagtac 60  
gaagaagagt tgggtctagc cacggcccac gagcatagaa tcgcggaaga gtatgcccaa 120  
gtatatgogg aaaaagaggc tagaggaagg gtgatcgact ctttacacca agaggcaacc 180  
acgtggatgg atcggtttgc tcttaccttg aacggggagtc aagaacttcc ccgattgtta 240  
gccaaggcca aggcgatggc agacacctac tccaccncg aagagattca tgggcttctc 300  
ggctattgtc agcatatgat agacttaatg gccgcataa ttagaaatcg ttaggaaact 360  
tgtatggtct cttagacctt gactagatat gact 394

<210> 3791  
 <211> 408  
 <212> DNA  
 <213> Glycine max

<400> 3791

taaggcttgt ttccttggtc aaatcaaadc aattttttga agttgtttt gttatcaagt 60  
 ccatgcaaaa acatttgaat tcatttggtc tttgggaaag ccattcattg ttttcattct 120  
 caatgttttc aaaaatcctt ttgttggtt ttgatccaat caaaagtaag ttttagaaac 180  
 atcggttatt gattctttcc aaagcatgct atgcccaata aaaaatttct gtttaagtcc 240  
 caaaaggagt tatatataat ctacaactac actaatagaa caaaatatat caaagcatgc 300  
 ataaactagt caaaaacata aactcgcgta agtttccaaa caaaaatcca aaatagtaaa 360  
 taagataata agtactaaa atttaataca aagcgataaa tgaacata 408

<210> 3792  
 <211> 354  
 <212> DNA  
 <213> Glycine max

<400> 3792

agctttctaaa aggatgtcaa tttgatgttc tatgcctctt gtaggtggca gcccatgagg 60  
 aatctcctta ggaaagatat ctttaaactc ctgcaataag ggttcaacac taggagaagt 120  
 agaaatagtt aactcattaa aattatcagc aaaaactcta ttgtatttgc aatacagtag 180  
 atagagtggc tcacgagcaa gtaacacttt cctcacttca cccgcctttg ctacacaaat 240  
 aaattttctc tcattgtgat cactctttcc ctacagtgtc tcactcttct ttgtcctatt 300  
 cttctttggg ggttcaatct ttttttctc tatgtctctc ttttctctca ttct 354

<210> 3793  
 <211> 359  
 <212> DNA  
 <213> Glycine max

<400> 3793

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 tgctagacag tggatccctc ctgagattgg acaagggtgat gtcagatgtg atgcttcagt 120

cccttaactg cggagggtca caacttatgg aggggcgctt catgattata catgaaatgc 180  
 tctgcgcgga ctcaaataca atactggaga ttcatctgtg ctgaatgtag aattgctgac 240  
 tattctaatz aatcttgcct atgaaatgct atttcctttt aggaatggat catggaatag 300  
 cgggaaaaga actatcacag tacttctatt gcaggggcta ataatgggag ctctatcat 359

<210> 3794  
 <211> 399  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3794

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 ttgatccctt gagtcaccaa gtttaggtaa atgagattca ttcttcatcc taaacttgat 120  
 ttgtcttcat tctcttgctc tagtttctcc aataacttgt aactgccatt ttgtattacc 180  
 catgaaggaa aactttgaaa aacctaaata ttcttcattc ttccttctaa atttcgtgga 240  
 gtctacaaga ggtaagggga gtctctccaa ctcttgaacc atgtgcttgt tgttgaactt 300  
 acttgaacat gttgttactt tgaaattttc aagcttgctg ctattcctgt atatgtgtac 360  
 tgagatatnt tccttgagct ttgatgccaa aaatgattt 399

<210> 3795  
 <211> 429  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3795

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 ccacttagag gtaagggatg agtttatcgc aattgggatt agaatgaaca tgtgtaggga 120  
 tccttagagg attaaatttg ggtttatattt gggatgttta ttgaattata atttttctct 180  
 tacgattata attatgagat tattatgttt gatgggtcaa ttgattccct gatacgaatt 240  
 ggttgataaa attgagtgtt cttggtgttt tcgttctttt aacctatgat tttgattact 300  
 ttgattttga tatgattatg tgaaattttt tgaggggttt tactcctcat gttgtgagaa 360  
 gtatttttgt tggacaaatg gcctcagtta tcttaagaat aaggagttga attaagatac 420

aaaaactat

429

<210> 3796  
<211> 419  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3796

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tttctatggt tgaaaagtga aattttaaatt gaggtaaatt tgaagcaaac tctcacctca 120  
caccagtcca taacatccat ttagacttgt tcaaactgga ttacaccta aaatctcacc 180  
gaatcaaaat ttgactcttc aacacccaaa ttgacctag aaatggctct ttgttcactt 240  
tggtcattta tttttctctc taacacagtc caagctttct cataagtctt aaatgacatt 300  
tcaagctagt attaactcac tttaacctcc atttaccaca gaattcagac ttagccttcc 360  
aaccctcaga gtctcactct gtttccactc ataacatcac attctcactt tctaaccct 419

<210> 3797  
<211> 427  
<212> DNA  
<213> Glycine max  
  
<400> 3797

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ctattacaat gcacccaaga gaccatatat ctaacgctgg ttcaatctga ccaacgaccg 120  
attctgggtga catgtaaaaa ggtgtccctc taaacttgac cttcccatac tcagcatttg 180  
catcttctct agtcttggac aacccaaaat cagcaatctt cagttgatac cttgcatgat 240  
catcagatga aggaaagaga aggatgttgt ccggtttgag atcacaatgg acgactcctt 300  
ttcgatgaat gcaagaaagc cttttgagaa gcatacgagt gtagactctt acttcactat 360  
ccgatattgg ccccttcttg ttactaaacc aagaagagaa ccataaggag cacactccat 420  
gaaaaga 427

<210> 3798  
<211> 426  
<212> DNA  
<213> Glycine max



<223> unsure at all n locations  
 <400> 3798

agctnntatt ttatttatat attatatatt ttataattnt atgtantttt atcacactat 60  
 tcaaaaccta ttttataaaa taaatataca atatgaattt tatctttaag ttatatatttt 120  
 tacctaaatt ataatttcat aaaatgtag tattttatta tttataaata tttatatatg 180  
 tcaatgaata tcttatacct atattaagat atttttatta tttattataa taggttttta 240  
 tattttaaatt tatttaataca ctacttttta aaagaattaa attttataat aaagatatat 300  
 acataattaa ataaaatgac catattttct atttcttaaa atatttatgt atggaattta 360  
 ttgatattat tatctttatt tataatataa taaataacat gagtacctta acatatataa 420  
 aaaaat 426

<210> 3799  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3799

tagacgactn tgtttgaacc gagatgactt tattattaat tggacaagtt tttatataat 60  
 gtagaagaaa gtgaatctga gccttttacc cctttgaaag acttgtattt aaaaatgttt 120  
 taaaaatact ttttaattaat atttaatttt ttattccttt attagtatat atgtgaaggg 180  
 tagaggggtg cacaagagac tatataaaca atcttttaaa aataattcaa cgggaaacta 240  
 gaaagaaaag tgagccaaga agcctcattt tgtttaagtg agctagagac caaccggcgc 300  
 aagctaaaaa cctctataat aggaaatacc aacagagtct gctttcaaca gaaaaagaca 360  
 aaatctggaa catgataaaa aatagaaaaa tcagcagaca ttagag 406

<210> 3800  
 <211> 402  
 <212> DNA  
 <213> Glycine max

<400> 3800

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 aagtccgtac catgtgtttc ttatgttaca atcttactca aagtgcatat cttttgttat 120

gatctttcag agtctaagtt gttcacctcc cgtcagtgtg aattcattga agatgttctt 180  
 tcgttttctt ccacttcaag tcaacaacac atgatccata accctcaaat tcaaaattca 240  
 caaccgaatc ttccaaatcc aacctccacc aattccaaca aacaattcag attccagctt 300  
 atattttaat atcaacattg taccaccca agcacctcaa tatcaaccac ctttaaattc 360  
 aaattccacc ttctcacaat tccagcttat cttttaatat ca 402

<210> 3801  
 <211> 381  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3801

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 ttgaagagac ggcatgggta tctacttctt tcctttntgc cctgttgcc cagattcttt 120  
 tggcattcgc atttgcgag gaaacgtaat caaactttcc tcttttcaat cctacctcga 180  
 ttctttcccc ggcgaaact agatccgcaa agctggacgg catgtaacct actagcttct 240  
 catagtagaa cactggcaga gtgtctacca tcatggtaat catctctctc tcaaccatgg 300  
 gaagagctac ttgtgccc aaatacctcc atcgtgcgc atattcttta aaggtttcac 360  
 cctctttctt gaacatattc t 381

<210> 3802  
 <211> 360  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3802

agctttgcag cagatgccac tctactctta attcttgaaa gatatgttaa caaggaagca 60  
 taaatatatt catcaggaaa acatcatagt ggaaggaaat tgcagtgggtg tgatccaaaa 120  
 gatccttcca cctaagcata aagatcctgg gagtgttaact attccttggt caactagaga 180  
 agtcaatgtg ggaaaagctc ttattgacct aggagctagt atcaatttga tgccactctc 240  
 catgtgcaga agattgggag agttggagat aatgcccact cgaatgacat tacaattagc 300  
 tgaccgctcc attaccangc catatggagt aattgaagat gtgttggtca tagtgaaaca 360

<210> 3803  
 <211> 414  
 <212> DNA  
 <213> Glycine max

<400> 3803

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 atcagttcac gatgctttga agaagggtgc ggttgaggga gtctttatga ctgttggtggg 120  
 agagttttat ttgcctttgt tgcaaaagtc gagttctgct ctgtcacctc tgctgagatg 180  
 cgggttatct atcttggtcat tagcattgct tggaataaaa ggatacatta attttattgt 240  
 agagtctgat tccttgaatg ttgtgaatct aatttctaag ggttggtgatt ttcacatcc 300  
 ttgtgctact tgcattatta aaagcatagg tgagcttaca gctgatggag actccctgag 360  
 ttggaggcat gcattgaggg aggcaaataa gttggtaaat tctgtctaata ctct 414

<210> 3804  
 <211> 336  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3804

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 taagaaagag aaatccaaaa gtgaaacatc cgattgattt tttcgcttta ttttactaaa 120  
 agatattttt taattatatt attattttat ctcttttttag tttccaacgt gggtacggta 180  
 cgacggaacg gtcggatttc atttttagcat aaattaatgg atattacaaa tcaaacgac 240  
 ggtggaaatt tattttattt ttgattagg agagaaaatg acttaagtaa atgactgaag 300  
 cacgtcaaaa ggggtacgaa aagtaaatga nacgag 336

<210> 3805  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3805

ntgagggtgc gcagcccacc atcttttcat agtagagtat cgataatgtg tctaccatca 60

cgattatcgt ctccctttcc attattgggg gtaccacctg tgccgccaga tccctccacc 120  
 ttttgggcgt gttctttgaa tgaaccgccc ccctttttgc acatgttctg tagttgcac 180  
 ctatccggaa ccatatcaaa attgtactga tacggcctaa caaaggcaac cattaggtcc 240  
 ttccaagaat ggactcggga aggttccaag ttagtgtacc aggtaacagc taccacagta 300  
 agactttctt ggaaggaatg tatcagcaat tctcatctt ttgcgtatc ccccatctt 360  
 tgacagtaca tcttttagat 379

<210> 3806  
 <211> 413  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3806

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 tcaaggtaga ggggtctttc cacttcttga accctaacct tgttgtcttt ggaagctagc 120  
 cttcattgcc tgttgttttg atgttcaaatt attcgtagct attgtcttgg ctggaactgg 180  
 aggatacatt actttttatt tttatttttt tgaaacttta aggttaaaaa tgatttcttt 240  
 gggcgtcaaa acttaggggt agccttaaat ttcacttana tcggagtta aggatatttt 300  
 gtaggattga atctgtcacg aaattaaaat ggtgggtatg actatatgga atttttcctt 360  
 aaagatctga ctanaaaatg aagttgctat gtgtgaaata tagggtagca tgt 413

<210> 3807  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3807

tgctcgggttc agtttcaatt acgcgcttgn ggcacccat ggactgagag aaaaggctca 60  
 ggtcatcaaa tattgcacat cttttaagc acaaagcgag gatcggaact tacgttcttt 120  
 ttaaaaggct gcgatgagaa aattacagag gacatgaatc cctaggggaa accaagaaga 180  
 acacacaaaa gtagcgactt cctcaattac cccagatctt aagcatagta tcgcttgaca 240  
 acgttgaggt tcacgggtga aggtagctcc tcgtcatcca tggtggcgag cactagggcc 300

cctctggaga aagccctttt tacaacgaaa gacccttcgt agttcggggc ccactctcct 360  
 ctgttgctctt tcagagcttg gcagactntc ttcagcacta agt 403

<210> 3808  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3808

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 gatattcttaa gaaggggggg ttgaattaag atattccaaa ctgtttcccc taattaaaaa 120  
 tctatttttc tttttactta agttatgaat tcccttaatg acaatcttct taaatattaa 180  
 ttcaaagtaa gcaacttgaa tatgaatata aagcaataat aaataaagga gattaaggga 240  
 agagaaaatg caaactcagt tttatactgg ttcgggcaca cccttggtgcc tacgtccagt 300  
 cccaagcaa ccgcttgag agttacacta acttgtaaat tccttttaca agttctaaac 360  
 acacaaggac aacccttcct ttgtgtttag agat 394

<210> 3809  
 <211> 408  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3809

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 gcccacatt atttccatga cacaatgca aaaatgatga tttggaaatt ttatgcaaaa 120  
 ctggtcatgc atgcacctat gtggacactc aagtgtcaaa tttttatggt catgtgatgc 180  
 tagggctcag gattcatttc ctctatttta aatcaaccca atgtttccaa aatatgttct 240  
 tttatcaatt tgtgcattca tccgagtcca tttcgggcgt ccgngaaaaa cttcacagca 300  
 ttcacccttc aggtgtatac acattttttt caaaaactag ttatgatcaa ctgaattttt 360  
 tcaaagaaaa gttggaaatc atctcttttc aaagcatgtc ggttttta 408

<210> 3810  
 <211> 380

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3810

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 aaaggcacia ataattcatt cagagtgaag actgaaaatt aataaaataa ttaaaaatct 120  
 tatgacttcg atcaaagacg gttttataaa aaccatcgtt aacggctaaa aatagttggc 180  
 attaatattca aaaatgccac caaatgtttt actacatcga tttttcaata accgacgtag 240  
 atacaacgac gcagaaagac gctntttctag tagtgaaaga aagaaaacia tcctatacat 300  
 aaaaaagaaa gaaagtaaac tttgaacgtt ttatgggttt aaccacaacc acaacanttc 360  
 taatggactt gtttcattat 380

<210> 3811  
 <211> 411  
 <212> DNA  
 <213> Glycine max

<400> 3811  
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 ttcttcagaa gcttccttga gaagattcct agagaaacta aagcttagct acacacaccc 120  
 ctctaatagc taagttcacc tccttgagat gagaagctag agcttaacta cacacaaccc 180  
 ctataatagc taaactcatc cccatgccaa aatacatgaa aatacaaaaa aatccctact 240  
 acaaagacta ctcaaatgc cttgaaatac aaggctaaaa ccctagacta ctagaatggc 300  
 caaaatacaa ggcccaaaaag aaggaaaaac ctaatttaat atttacaag aagagtcgac 360  
 ccaaccttgg cccatgggct cagatatcta gcctgaggtt catgagaacc c 411

<210> 3812  
 <211> 376  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3812  
 agcttatcca taacttgact aaagaatggt gcaactgact gtagtaatac aagatcagaa 60  
 naagattaaa aaaaaaagcc aaattgtccc aaacaatgct ctctcaagta ggatcaatat 120

ctgaaaaatg aaatgttaaa tttagaaatc taagtaaata ttgattccta attttttaaa 180  
 tgttggaag acttggaaga caaaaattgc attaaaatag aaaatgcaa acatatagt 240  
 ggactgagac acattagcag cgtttcctca actcaaaaat tataagaatc agaagtaaag 300  
 agtatgttaa gagtgtggta acatactcta acaagctttg atcaaagac taaaattaat 360  
 tgggcaaaaa gatatt 376

<210> 3813  
 <211> 405  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3813

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 gggcggtgaa gagacagcat gggtatctcc ttccttcctt tttgcccccg ttgtcccgat 120  
 tcttttgga ttcgcactcg tgaaggaaac gtaatcgaac tttcctcttt tcaatcctac 180  
 cttgattctt tccccggcga acactatgtc cggaagctg gacgacatgt aacctactag 240  
 cttctcatag tagaactctg gcaacgtgtc taccatcata gtgatcatct ctctctcgac 300  
 catcgaggga gccacttggt ctgccaggtc tctccaccgc tgtgcgtatt ctataaaggt 360  
 ttcgccctct ttcttgacat attctgcagc tgagtgcgat cggga 405

<210> 3814  
 <211> 399  
 <212> DNA  
 <213> Glycine max

<400> 3814

agcttttcga ttcattctat gtaccgtag tggccacat tgtgtttcgt gcatttttat 60  
 tctcgttttg tttacttttt atacccttg ttgacgtgct taagccattt tacttaagtc 120  
 atttctcgct taacttaaaa ataaaataaa tttccaccga acgtttgaat tgtattatcc 180  
 attaacttcg ggtaaaataa attccgaccg ttcggtcgtg ccgtaaccac gttggaaatc 240  
 aaaaagaggt aaaaaataat ataataatca aaaagacatc ttttagtaaa ataaagcgga 300  
 aaatcaatcg gacgttttct ctttgggatt tctcattctt aatcgatgg attaataact 360

aaagtgaac taaggctaaa atcaactcgc ctagtcaag

399

<210> 3815  
<211> 407  
<212> DNA  
<213> Glycine max

<400> 3815

tgcatgattt acattctccc cctttcttaa gcaaattctt aattcttctt gacatcatca 60  
aaatcttcat gatttacaca aatagttttg tctagttatt ttgctagaag tataccaatt 120  
ttatatacct tcaaatttgc acatgcattt ttcctttcta attaaaatta tcttaatctg 180  
ttgtaattaa tggtaaaatt tattttctta atctattgta attaatatta aaatttaatt 240  
taataattaa tatttaaag atagattaaa tataaataat acataaacct cttattttta 300  
tttaatatat catttaaata tttatttatt agataaattt taccattaat attaattaca 360  
atcatgctaa tatatattat ttttaattat ttatattttt tctgatg 407

<210> 3816  
<211> 404  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3816

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ttgtttctac gctagctagc actgtcttgg atgcgtacca agtagaactt atgccaatta 120  
aagctgcacc aattttaact gtgtctctgc taaattggca ccaacttatt accccctata 180  
ttaaagacaa aataactcca tctacttcaa tcaaatttc cttctttcat gatctttctt 240  
tcaccagcta gctatgcacc cattccaaag ttaatttaag ttgatactgt aggggtggctt 300  
cataattaat acttgtctgg gttgttttaa gaaagatttt tatttaagga aaatcgatct 360  
tgaaagagaa tcattaaatt cgactatatg atatatttta atta 404

<210> 3817  
<211> 426  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations



<400> 3817

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ttaagtgcaa catattgctt tggaagcaag gttacgatca ccggaaacaa cgggtgtctct 120  
tgatcggtat caccggtttt tttctgatgg atttttttca ccatgatttc attcaaattg 180  
acaaattcta gagcatgact tagtgtggag agaccaactt acatatttgt agggagtgtg 240  
ggccttggtta tagggcccat cgccaactgg taagcctggt accataaata ttatcctact 300  
tttatgatgg aaaggaataa ttgtccaaaa taattatgtg tagagcaatg ccaatgccaa 360  
tgccatgcgt cccanagtgg aaatcaacta ggatttgcac ttacgaaata naatactgat 420  
ttgatg 426

<210> 3818

<211> 399

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3818

agctnttana attatttttcg cctctttctt ctaataggag atcagggaca gttggttggt 60  
gataatacag ttttaagggt gttttccaat gtttggaatt tattggatta atgtcttttt 120  
ccgatactga acctatttca attgtttttt ctaaattttg gtcactatct tcattaatga 180  
aattaattaa tttggagggtg cttcttggtta ccatttttga agttcctttt gaagggtggg 240  
gagtttcaag gatgactcta agtaaaactat caagcttggt taataattca ctattattgt 300  
cacctactcc ttctataacg gacttggttt tccttagttc cctaattttt tgttatectt 360  
gtcactaatc ttgnaagggt tgaataaagg ttttctatg 399

<210> 3819

<211> 429

<212> DNA

<213> Glycine max

<400> 3819

tgaggtcctt cattgcaaag atgtttttca agatactata ctcactctggc acttcaatat 60  
tcaaacttct tgcatgatcg agaagagagg ggaaagcaac ttcaaaccgg ataggcatat 120  
gttctgcatt ttcactctga agcttgtaca aattctcctt aaaaaatgac attcctgtta 180

catatgaatg catatataca caatagaaac attaaattaa cataaacgtg ctgataaaaa 240  
aataacattt atatcataat actttactat ttcccggtcc tcttctttta ctatggaata 300  
gaggtgtgaa agtattgcag aaaagaaatg attaagagta tgtatctaac aaaagaaatg 360  
attaagagta tgaaaatatc tgggttaaaa aaaaaagagt acgacaatat cacagtcagc 420  
aaggaattc 429

<210> 3820  
<211> 274  
<212> DNA  
<213> Glycine max

<400> 3820

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tatagctagg aagatcaaatt ttttctctaa aggaaaactc tttaataggg taaactatat 120  
ctgaccaaatt aaaactcacc tcatgaatac ccaaattagc tacaccactt gtacaactat 180  
ttccctctct aaaaataaga gacaccacaa aattcaatga atttgtgtaa gaaacaattc 240  
atctagcaat ttctcaagtt ccacggcaca atgg 274

<210> 3821  
<211> 421  
<212> DNA  
<213> Glycine max

<400> 3821

taacaaaaca catggaaatc aaattattaa ttgataaatg aagtcattca ctcatgccat 60  
actccttaaa ataaaataaa aaaaaaaaga gtagaaacta aagctgtaca gaccatatta 120  
actaaaagaa attcaagatt gaatgatata taaacaaaaa gcaatctagc atcaactgtc 180  
ataaacacag attttatcca aatagaatac acttatacac ccataatgag aatgagaca 240  
gccacaacct aaagtcccaa actaattgag ttccaattct atcagcattt tataacaacac 300  
acaacaatcc cttcaattat tatcactcaa aaaatcttat aaatagggaa aggaaacagg 360  
gttgtagctg tggcaccatg agcaaaatga cacttattgc caaaggggca ataccctgtc 420  
a 421

<210> 3822  
 <211> 356  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3822

agctntgagc canaatcctg acacaccata taccttgacc cagggtgaga atgtcaattc 60  
 ttaccctcgg aagcaaaaaa aaaggggaga gggaaaattt ccaatcaaag aggaagcaaa 120  
 aaaggagaga aggaaaattt ccaatcaaag gaaaaaaga gaggaaggagg aattcccaat 180  
 caaagagtgg gagaaagcaa aaagaaaaga aagaaaattc ccaatcaaag aatgggagaa 240  
 agaaaaaaga gaagaagaaa gggaagaaag ttcccgatca aaaaaaaaaa taatatgcag 300  
 aaaggtcttt ggaccggaca atatctgaac aatacagaat tgtcaccaaa tgaata 356

<210> 3823  
 <211> 430  
 <212> DNA  
 <213> Glycine max

<400> 3823

tataagaaca aaattgcctc aatcatttcc aaatatgcat gtgaattagg atgcatcaac 60  
 aagaatcaag ccaaggctat tgtgcaagca atcaatgggg caaaacacac caaatgatta 120  
 tgatgatgga tggctcaaat tctcaciaag gtaaaatcat cactttcaaa ttgagctttc 180  
 aaaactatca tgacatgtag agaagaatca aggatttcaa gtcacaaaat gtcaagaact 240  
 tttattttca aaacacttac ccatttcttg aacatatect ataattcaaa gataaacatg 300  
 caaagtcgta cgtgcacaca aattgacca aaatattaaa ctaaaaatcc gacgaaacta 360  
 acaacattaa caaattaaca caactaaca attaacaaaa ccaacaaaac tagcaaaacc 420  
 aaagaacact 430

<210> 3824  
 <211> 353  
 <212> DNA  
 <213> Glycine max

<400> 3824

tcctctcagt cacctgcggc atgcaagctt gtaaaaaggg aagcaagtta aaaactcttt 60

tcaaagtaaa aacgttggtt ctacttcaaa accctttgaa ctacttcaca tagacttatt 120  
 tgggtgcctct aaaactatga gtttggttgga gaattactat ggcttagtta tagtagatga 180  
 ttactcaaga ttcacatgga ctttggtttt gaaaaccaa gatgaagctt ttgatggttg 240  
 ttgcacactt gccaaagtca ttcaaatga aaaaaggtct taacattgtt tcacttagaa 300  
 gttatcatgg aggtgaattt caaatgagtc tcttgaaatg tttgtgagaa aat 353

<210> 3825  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<400> 3825

tgaaggtgtg tagtccacca tcttttcata gtagaatact agtaatgtgt ctactatcat 60  
 tgttatcatt ttttctccgt cattgaggtg ccacttgagc ttccaggtct ctttaccttt 120  
 gggcgatttc tttgaaagat ctgtgcccct ttttgacat gttctgttgt tgcacccat 180  
 ccggaaccat atcaaaattg tactgatact gcctaacgaa ggcaaccatt aggtccttcc 240  
 aagagtggac tcgagaaggt tccaggttag tgtaccaagt aacagctacc ccagtaatat 300  
 tttcttgga ggaatgtatc agcaattcct catcttttgc gtatgcccc atcttccgat 360  
 aatacatctt tagatggttc ttgggg 386

<210> 3826  
 <211> 400  
 <212> DNA  
 <213> Glycine max

<400> 3826

agcttcattg cttcatgatg atgaatcatg attgattcaa ggtgttttga tgataacaaa 60  
 gatgatggca aaaagcccat gagaatgatt tcaagattga gtcaagaaca attcaagaat 120  
 caagagaaag attcaagaga agtttcaagt ttcaagtttt caagaatcaa gaataatcaa 180  
 gatcaagatt caagactcaa gattcaagaa tcaagaaaag gctcaatcaa gataagtaca 240  
 aaaaagtttt tcaaaacatt gagtagcaca tgaagttttc aaaaagctt ttaccaaaaga 300  
 gtttttactc tcgggtaatc gagataatca attaccogtt tactgtaatc gattaccaat 360  
 ggcaactttt tgttttcaaa agctttaact ggattataac 400

<210> 3827  
 <211> 407  
 <212> DNA  
 <213> Glycine max

<400> 3827

tcttctatat atagacttca tcttcaagta tctattgtct tacaaccggt ggattcttca 60  
 cggttcttcg tctgagggtct tgaaactggt agagcattta atgcttgcat taaatgtaca 120  
 tccctttttt catgcaaatt ccatgcttga taggttggca tgtcttgtag ttcagtaaga 180  
 aagtcacttc ttccatcata ataggctctgc actagcaaatt catgcctttt gatgaagatc 240  
 ataactttca gactgtagac ttcattttatt ctccatagaa ctttgacaaa tcccaggaga 300  
 atgttttatg caagagagaa tcttagacac agattattaa atgacgatct taaatgcact 360  
 ccttaatgat atgctagatt gtcttatatg gacgtatggt tgaaaac 407

<210> 3828  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3828

agcttggtga cacctttctc cggccaattt attggtaagn ttcctattgt tatactcaag 60  
 aatctcttgc tttgcaaatt atctatatgt ttcacacccc atacatttgg gtaactcatt 120  
 gatatttaac acaaaactttt attatgcaga ttaacagggt gaagctccaa ttatgattaa 180  
 aaaacacggt gaaaaaacat ttaagaaact acatttaagt tttgtccatg gaattaaact 240  
 ttcatatattg tcccttaaat tataagcaac aatcactcta atcctgattt ttttaaaggg 300  
 aaaaatatgc ggacaccttt acagactatg tctctttata tctcttatcc tatcacagta 360  
 tatattttca gctatgatgc ctacactttt ctctagggtg catttagctc tt 412

<210> 3829  
 <211> 422  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3829



tgggagatag gaacatgtta gatggagtgg tcattaccaa tgaagtgatt caagaggaaa 300  
 atcgtaaagt taaatcatgt gtggtgttca agacaaatcc tggagtggtc attgtcaatg 360  
 aagtgattca tgaggcctac cagtttgagg ccatgcttc tagactaact ac 412

<210> 3832  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<400> 3832

agcttataag aacatatttg cctcaatcat ttccaaatat gcatgtgaat tatgaagcat 60  
 caacaagaat caagccaagg ctattgtgca agcaatcaat ggggcaaaac acaccaaatg 120  
 attatgatga tggatggctc aaattctcac aaaggtaaac tcatcacttt caaattgagc 180  
 tttcaaaact atcatgtcag gtagaggaaa aacaaggatt tcaaatcaca aaatgtcaag 240  
 aggctttttt tttcaaaaca attacccatt tcttgaacat atcctataat tcaaagaaaa 300  
 acatgcaaag tcgtacatgc acacagaatt gacccaaaat attaaactag aaacccaatg 360  
 aaactaaca cattaacaaa ttaacacaac taacaaatta acaaaaccg 409

<210> 3833  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3833

ntctaaagtt ntttggtttt tccatacctt gaaaaaaaaa agtgtgctat tcatttttct 60  
 ttctcttctc cctttgctaa aaagaattcg ccaaggacta accgcctaaa ttctttttgt 120  
 gtctctcttc tcccttttcc aaaagaacga aggactaacc gcctaaattc ttttgtgtct 180  
 cctttctccc ttgtcaaaga attcaaaacg acacagtctg agaattcttt tgattcttcc 240  
 ctttccctta tacaaaagat ttcaaaggac taaccgcctg agatatcttt tgtatcccc 300  
 ttcacaaagt ttcacaggac tagccccctg agatctttgt cttaacacat tggagggtac 360  
 atcctttgtg gtacaagtag aggggtacaac tacttggg 398

<210> 3834

<211> 561  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3834

cacgcgtcca ccactactca catanaanta ctatanntgn ttntantnta acatnnnnan 60  
 nnaanacacc cgacgaagcg nngattgatc cctngagaa tcgaanccac tcgaaccctg 120  
 agacactcta taaactcacg ctcacaacag caggcggcgc agaatacaca tctactgagt 180  
 tcaggtcatt ttgtgcaaca aatggcacga aacatcaagt gacagcacc tatactccac 240  
 aacaacatgg ggggtggacag agaaagaata cgaccctctg cgaatatgct gagaagcacg 300  
 accaaagaaa aggggttcacc aaccctctg tggggcgag caactgctac tgcagctcat 360  
 ttgtagaaca gatgtccaac caagagagta gagcatgcac acccgaataa gctcggcagg 420  
 aatcaaaccg tgtgtgaaac atctgagaac gcttgggtcca ttgtgcccc tgcacacacc 480  
 cgaacaattg agtaagaagc cagatgacac ggctcaatcc ggcgtcacgg ccggatatca 540  
 ctaacaaggt gatacaaatc g 561

<210> 3835  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3835

agcttnttgg agtagaaaca tggttccttc tcattttatt tcaaaaagtt gtatctagtc 60  
 aaggtctgag agaccataca agtttcctag cgattttctaa ttatgtgggc cattaagtct 120  
 atcatagcgt gacaatagct aagaagccca tgaatttctt tgggggcgga gtaggtgtcc 180  
 gccatcgct tggcctttgg ctaacaatcg ggaagttctt gactccggt caaggtaaga 240  
 gcanaccgat tcatccacat gggtgcctct tgggtgaaag agtcgatcac ccttcctcta 300  
 gcctcttttt ccgcgtatat ntgggcatac tcgtccgcga ccctatgctc gtgggcccgtg 360  
 gctagacctt actcttcttg gtact 385

<210> 3836  
 <211> 374  
 <212> DNA



<213> Glycine max

<223> unsure at all n locations

<400> 3836

tattgttttaa ctactctntg agtgtgtgat tctttatatt ccataaaaca ttgtgttttt 60  
gaaagtcag agtggcttag tgaattggtg ctggcagctt gaacatgcga acttgtaaca 120  
attactggga attggctact acgaattttg agctganatt tttactgcat tntctagaca 180  
tttggaaaaa taattagaaa aaaagaacca agtgatttgg ataaaaggaa aaaataatca 240  
taatcacaca agttggcggg aaaatcagtg tccaagataa atagtgaag ggaagtgtgc 300  
ttgttgtttt ggctcanaat ttgttctata attggcgcct attttatacc aatcttagtt 360  
ctgacaattc aatt 374

<210> 3837

<211> 383

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3837

agcttgtttg aaacctgagg gatgcctata gcagtcacct tcctagttac caaccaaacc 60  
tttgtgcca tgcttggtcc acgtcggacc aaagaaaaag gaaacagaaa aggaaaaggc 120  
cgaaacaccc aaaagccaaa ttccccacca aaattcaact tctaaaagt cctattggcc 180  
catgattatg catgttatcg ttgatttcat aggaaatgat ttgcaaagtc aaatcatgac 240  
atatctatgg tttggaatta ggatgaaaca cttgcatgtg tgagatttta tacactntga 300  
gtggttttcc tctatttcat tcgcaccag tgtttcttct aaatgccctt ttagaaatga 360  
aatgctaata tcccacaatc tca 383

<210> 3838

<211> 387

<212> DNA

<213> Glycine max

<400> 3838

tctcaaggag gtgagcttag ttatgagagg ggtgtgtgta gctaagctct agcttcttaa 60  
ggaagttttc tcaaagaagc ttctcaagga agttttctca agaaatcttc tcaaggaagc 120

tacctagtct ataaatagaa gcatgtgtaa cacttgttgt aactttgatg aatgagagtc 180  
 ttatgagaca actcaaagtt caacttctct cctttttttt cttccttcaa tttcgtgctc 240  
 cccctctct ctttctctcc ctctttcttt tcttccattg aagcatcctc tccaagcttc 300  
 ttatccaagg ctcatcttgg tggatgaagct ccttcttcca tggcttattc cctagtggat 360  
 ggcgctcct ctcacctctt ctctttt 387

<210> 3839  
 <211> 390  
 <212> DNA  
 <213> Glycine max

<400> 3839

acaaagaata gggtcattca taagcttctc ttttaataaa ttataagttt tctcatgcac 60  
 atcagtccac ttgaacacca catccttttt tacaagttca tttaaagggtg cagcaagtga 120  
 actagctaaa ccacgaaaac ttcttacctc attagcattc ttaggtacag gctattccct 180  
 aagtgccttt actttttctt cctcaacact tattcctttt gagctagtga caaaacctaa 240  
 gaatacaaca aattcatggc aaaaagaaca cttttaaaga ttggcacaca atttattttc 300  
 tctcaaaaaca ttaaaaataa catgtaaatg atcaacatgt tcttctaag tttgctataa 360  
 atcaaaatat catcaaaata caccacaaca 390

<210> 3840  
 <211> 430  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3840

tacgaacca aactttntaa acttcaatgc aagaaaacat actcatgact aggaacccaa 60  
 agtttggttt taggattaga aaagcatgaa aatagggact tgtttgtaaa aatttgggct 120  
 gccccatgat tggcactttg cacctaagta acgtgggaga tgcttttcaa tgggtgtgtag 180  
 ataagtgtgt aaatatatat ggcataaaaa tatgtatata tgtgaatata tggcatgaaa 240  
 ataccttgca aagtgaatga atagtaaata atgcatttca aaaatgtata tttatggata 300  
 ggtagcgtaa aaataccttt taaaatatgt atatttgtgg ataggtagca taagaagcct 360  
 ttcaaaaaaa aaaatgtacc catgccaaaa atggcacaag aatgcttccc aaatgaatat 420

atgatgtgga

430

<210> 3841  
<211> 390  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3841

agcttcaccg gatgatgccg atcgaaacatt tcctaatacga catcatccaa ttgttattca 60  
gggattgaat aaaataaaca atggccggtg tcggtcgtta tatggccccg actgatatct 120  
ttcagccgac attgcgcaat ttcttttaca aacgctagcg ataatgtttt tttttttggt 180  
ttttacggta gaggaagttt tttgttttgg tgttgccctaa aaaatttaca atgtaggtcg 240  
gctaggtttt tccgtgagcg ctcaaccgag gggttcgttc gaccgacact ggcatgtagt 300  
tcttctcatt taagaggaca agacaacggt ggcccatccc ggcaaaaaca nnnaaaaaaa 360  
cattatcacg gaaattgatc gaaaaaaatg 390

<210> 3842  
<211> 433  
<212> DNA  
<213> Glycine max

<400> 3842  
ctcagcttat taagaggctt ctagcacact ccagacatct tctcatagat cccaacggtc 60  
agatcatgga agcgtgtttt gtgaagttgc agaccacatt tcgagacgat ccaacggtta 120  
atgaaggcca ggaagcgttt ttaccgagcg agcttcatgt agctttctct agaagcttca 180  
ttaagaggct tctctagaa gcttctcgt ggcttctttg agaagttttc tcaagaggct 240  
tctttgagaa gctacatcct tatctatcca tccctctatt aactaaatta acttccttaa 300  
aaataattac ggatgaaaat aacgcaaca ataatacaac atcaaacata attactaata 360  
atatatagat atatatatca ggggtgttaca catcatatat tgagacgctc gaaattgaac 420  
aatggaagct ctc 433

<210> 3843  
<211> 413  
<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3843

agcttgangg attggtcttt gccagtgaaa ggatcgatgt gggtcgaaa agaggcaaat 60  
ttgatcatcc tactaggacg actgagaaaa ctggggcaaa tgaagagggt gagaaagagg 120  
gagaaaccca tgctgtgact gccattccta tacggccaag tttcccacca acccaacaat 180  
gtcattactc agccaataac aaacctcttc cttaccacc aaccagttat ccataaaggc 240  
catccctaaa tcaaccacaa agtctgtcta ccgcactttc aatgacgaac accaccttta 300  
gcaaaaccaa aaacaccaac caaaaatgaa ttttgcagcg agaaagcctg tagaattcac 360  
cccaattcca gtgtcctatg ctgacttntc tccatatcta cttgataatt caa 413

<210> 3844

<211> 424

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3844

ntgcttgctt ctacagcagc aaagtttccc taaggtagctt acaattttta cgtgactttg 60  
ttcagtgcag cacatatgca tggggacctg ccgtgcatct taatccaaat gtaggcatgg 120  
gaacgatgca cgactttggc tccaaagagg acttctcccg taataaaaaa taaatcactc 180  
ggacacaagt tacttatttt aaaaataaga ttctatttga aaataattaa taatgtaacg 240  
cgagtccact gatgatttca ttttttttta ggtggttgca acgtggaaat cagcatattg 300  
gcaatgatga tctaatagtt tttgttgca aattggatat catgaaacga catgaggtaa 360  
gaagatcgta atgtattcgt taaacaataa atacaatgtc atgtttaagt gaaaattaac 420  
aatt 424

<210> 3845

<211> 427

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3845

agcttagcta ttntcogtcc attntcttca agagtaatta ataattatta tcattttgga 60

tgggaaaata aaagggttgc tgcaaccaat ttggttccat actaaccacc ctttgatcc 120  
 aagggtttca tggaaatatt gaatttgact ttatctttgt tctttgggtt ttggaacaag 180  
 atatttgatg tatgtcccaa caaaagtgc cgcaccaac ttaggaaaca acatgcatgg 240  
 ccttaaatac actaaacaat ttaagggatn gtttggttga ctgtttttta ttttcatttt 300  
 cactgaaaac aggaaatggt aataaaaata tgtttggttg gatttttgaa aacattttca 360  
 gtgaaaatga aaattaanac aaccagaaaa tgaanataat aaaatttcgt tttcagtatt 420  
 tcaattg 427

<210> 3846  
 <211> 428  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3846

tgcanagctg aaaggacaaa ggtacgtggg tgaagaatcg tggaaaaagg attgcttgaa 60  
 catctgtgaa agcactgcat gaaaaaagaa tggaaaccaa cggtcataaa tgataaaaata 120  
 gatccaaaaa actgtttttt tttttcttat aaatattctc ttccgatggg acttttggtc 180  
 aaaacattat tgaatacgaa attgaattaa actctttttt tctaacaaag attcacacct 240  
 taatttattg agttaggagg gactaacctt tattgctata cccaagctcc cataatacga 300  
 aataaatcat ttttgtaata gagaattaaa tagctcaatt ttttaatggt aaaaataaaa 360  
 tagtgtggat atacctatgc ttttttaccg ttaaaaatgt tttatatttt aactatatat 420  
 tatctttt 428

<210> 3847  
 <211> 349  
 <212> DNA  
 <213> Glycine max  
 <400> 3847

gtcacctgag gcatgcaagc ttgatgtcat tcaaaagaca ctatgtcgac ctaaattgatg 60  
 actaaacatg cattgtttat gtaattggat taattatgcg atataatttg gtgtaaccca 120  
 ttactaacta attaataatta ttaagtactc gtttggttaa acaaaaaaat tgtcgggtcca 180

acaaaaatca tttagcgta tagcatatcat cattgtcata attgacaaca cataatgaca 240  
 tgcattgcgta ttaaagtttg agcgcgacaa cacattgact gacttgacta cacattttga 300  
 aggaaaaata aacacgaaaa tgttcacgcg tgtctatttt tttgtaaac 349

<210> 3848  
 <211> 382  
 <212> DNA  
 <213> Glycine max

<400> 3848

tgaatacaat gaaactcgct agcttagcaa cactaagatt tactcaattc gctcaagttt 60  
 cattcgcca atagattgat agtggtacaa gactttattc gttttgtcta agattattct 120  
 cttgtgattt gacaacctta acacaaacat cttcaagctt tatatggact tcagagcttc 180  
 gatatgttga gagatcccag ccagtcgtta tctaatagct ttgatgcttg acacgaagcc 240  
 actactgtgt agaaagagag tggggaccat aaatactttc tgcaacatat cttcagaaaa 300  
 gtacaattcg ctagtgtcgc ctagtgtcga gagccgactt tcaacgtaca aatcaaaaaa 360  
 aatgttaacg acataagaca aa 382

<210> 3849  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3849

agcttgaagg caaattggat gcattgggta acttggtaac ccagctggcc ttgaaccaaa 60  
 aatttgtacc tgttgcaagg gtctgtggtt tgtgtcctc tgctgaccac catacagacc 120  
 tttgcccttc catgcagcaa cctggagcaa ttgagcagcc cgaagcttat gctgctaata 180  
 tttacaatag acctcctcaa cctcagcagc aagatcaacc acagcaaaat aattatgacc 240  
 tctccagcaa cagatacaac cctggatgga ggaatcacc taatctcana tggcttagcc 300  
 ctcagcaaca acaacagcag cctgtcctt ccttcaaaat gttgctggcc caagcagacc 360  
 atacattcct ccaccaatcc aacaacagca acag 394

<210> 3850  
 <211> 412

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3850

ntgatctacc accaccaccg ccaccatcat cttagttttc tattatgttt aacattatta 60  
gtactttgat ttctagccat gtatttggct atattattat gacatttgaa caatttagta 120  
tttcatttat ttgcatagta tgattgaaca attatgaatt atgttaaag actatgtggt 180  
ttttatatat ttgatctatt catgttactt gtttcatgat tggtttatat ttttcaatga 240  
atatcttggt aatgattagt aatgtatgta tgttttatat ttgttacgca ctttggcttt 300  
ttgttgatgc caaaggggga gagaaatggg gattaaatca agaactcaca taagtaatta 360  
acttaatttc aagtgaagca tataactcaa aacaaagggg gagaatatgg ag 412

<210> 3851  
<211> 387  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3851

agcttgggta gagtttgtct tgtgcagtaa gaagtgggcc tgacaaaata ctcataactt 60  
tgagaaagtt attgaaactt gggtactagc taagaactga atgtaatctc agtggttagaa 120  
acaagccaac ataattttgt gtcttatgta ctctacttta taactttgag ttgatttttt 180  
ttaaactctc tattaattag aaaaatttgt tttcatcgct tgatcggtgt tttttttttt 240  
tgaaaatctg ttatatgtct tatgcaatgt ttctttatat aacaatcttg ttctttttaga 300  
agaaagggct ttaaaagttt ataanaatac aattcaagcc ctttattggg ttattngctt 360  
tataatantt aaaaaataaa taaaaat 387

<210> 3852  
<211> 418  
<212> DNA  
<213> Glycine max

<400> 3852

tgacacattc ttgataacaa gacaaacttc atttgcttct tgtttgtgac aactttgttt 60  
tcacccaaat gattttttgc atgagaatgt tttaaataagg aaaaaattaa ttttcatgag 120

aaataaattt tgaaaaaata tataatgcac aactaacctg gtagaattgt tgtctagaaa 180  
 ttttcccaaa ttattataaa gtgatatcat aatatttaga aattttcttg cgaaaatact 240  
 gttgtagggc aacaaaggaa caataattat gaaaaataga ttcttgtaat ttgtttggct 300  
 cgagaaaagt atatgacata ttattaaggt taaggaaact ccctattaaa ttttataaaa 360  
 ttcagagtta tctaagtatt ttttatattt aaaaatagca tttcagaata atttttagt 418

<210> 3853  
 <211> 418  
 <212> DNA  
 <213> Glycine max

<400> 3853 .

agcttcatac tgcatattat tatgaaaata caatgttgaa agatcaatcc gacatcactt 60  
 atcaacaaga gtccaattca atatggatac aattaatatg tcttagtcta attgtatgtt 120  
 gaagaaccac ctacaactaa aggtcataat aaaaagagtg cagaaaagca attgggagaa 180  
 ttgaatgatt aatttaacaa attgcaagaa aagaaagga aatcgagtga ttgcataac 240  
 atttccagta aggcaatcaa ggggagtcgg aagggaaagt tgagatgaat ggctataaga 300  
 aaggagttgg gcagaagata gagccaggaa aagtagaggg agagtgctag ttctctcata 360  
 tgccatgtgt tgtcttttta tagtttcagt ctttaattgt cattgtgagg ggataata 418

<210> 3854  
 <211> 411  
 <212> DNA  
 <213> Glycine max

<400> 3854

tctgaaatat gaagtattaa cctatcaagg ctatcggtcc ctttaacatg acctgacca 60  
 ttctcagaac tccgcctaag tgaatgtacc tcttggtcgt agtctcttat tcctttggca 120  
 aactcatcac acaaattctc caaaaggatc cgtgcttttc tctctctttc aagatttctc 180  
 aaacaaccag agaaggaaga cttcacttca gaaagctccc tagccagctt ccgatgcagg 240  
 ctttctgaat gctgacgtaa cctcctctca tcttctagct cttccctgat tgattgaact 300  
 gcagctttta ttctaccatg ttctttgttc ttccctaataa gtttgtcaat tgtaatttcc 360  
 tttatcaagt tctccacttc ctgcctattc atttgattct ctcgtagtaa c 411



<210> 3855  
 <211> 339  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3855  
  
 agctntgagc caattcaaac gacaatatct ttntactccg atgtctgatt gagtcccttc 60  
 atatatcgag acgctcgaaa ttgaatgttg aagctctgag ccaattcaaa cgacaataac 120  
 tttttactcg gatgtctgat tgagtcccgt aatatatcga gacgctctaa attgaatggt 180  
 gaacctctga gctaattcaa acgacactaa ctttatactc ggatgtctga ttgagtgccg 240  
 taacatatcg agacgctcga aattgaatgt tgaacctcta agccaattaa aacgacaata 300  
 aacgtttact cggatgtctg attgagtcctc gtcatatat 339

<210> 3856  
 <211> 397  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3856  
  
 tcaacattca attntgagcg tctcgatata tgacgggact caatcatata ttcgagtaaa 60  
 aagttattgt cgtttgaatt ggctcagagc ttcaacattc aatttcgagg gtctcgatat 120  
 attgcgggac tcaatcagac atccgagtaa aaagttattg tcgtttgaat tggctcggag 180  
 cttcaacatt caatttcgag cgtctcgata tatgatggga ctcaatcaga catccgagta 240  
 aaaagttatt gtcgtttgaa ttggctcggg gcttcaacat tcaatttcga gcgtctcgat 300  
 atatgacgag actcaatcag acatccgagt aaaacgttat tgacgtttga attggctcgg 360  
 agcttcaaca ttcaatttcg agcgtctcga tatatta 397

<210> 3857  
 <211> 281  
 <212> DNA  
 <213> Glycine max  
  
 <400> 3857  
  
 agcttgaatg aattaccacg aggcgggttc tgtaacgact atacatgact ctgaaggcgc 60

ctgttcattt cagagggcca tgtgccatct acggcgctga tctttgtggt gactgatgag 120  
 accacaactt ccagcgtact gctggtgacc taatcaatcg actatcttta caggtattct 180  
 gtaccttgta ctggacttga gaataacatt aatcgtgtca tttgtcgtct gaacagcgac 240  
 cttggcattg aattagtgac cttaggggtt agtgtcatgt g 281

<210> 3858  
 <211> 154  
 <212> DNA  
 <213> Glycine max

<400> 3858

ctgtggctga caaatgctat atagcagctt cataggtcta atttaggccg cccctctct 60  
 ccctcgcggg agacattatc tatccctgct atctctattc tagttgcoga aggtagggcc 120  
 aagaactctt atctttacat gctatttaag cata 154

<210> 3859  
 <211> 393  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3859

agcttattct atttatagca ttcgtcttga agtatttgtt gtctctcaat ggatggattc 60  
 ttcactctac tcttcatcta aagtcttgag gttgtagag catttaatgc ttgcattaaa 120  
 tgtacgcccc ttcttcatga aaattccatg ttgatagggtt gacgtgctta cacttcacca 180  
 agaaagtcatt taattccatt atagcaagtc tacatcaaca tagcacgtct tttgatgaag 240  
 atcaacaatt ccagaatgtg gactttattt attcttcata ggaatntgac agatttaagg 300  
 agaatatttt ttacaagaga aaatatttga catagagtat taaatgaagg tattanatgt 360  
 taggtcaaag cttgaagccc tttgtttagt ttt 393

<210> 3860  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3860

tgtaacctgg acacggttga tgcccaagat cacatctttt tttcgaaaaa ggcgtgcgaa 60  
 cgaaagtgca caatacctac atatattttt tatttttatt tttattttta tttttatttt 120  
 ttttgaggta ttttgctacc taaacatgtg tataattttg tgagatattt ttgctatata 180  
 catgcatatc caaggatatc tactaccta acatacatat atatattttg tgaggatattt 240  
 ttgctatata catgcatatc taaggatattt tcactaccta aacatacata tatattntgt 300  
 gaggtatgac taccttacga gcttgtgctt gttttattta aattcctagg atcatggaca 360  
 attaggtgtg tcctactatg accaaagaaa caaagggtgat caaa 404

<210> 3861  
 <211> 310  
 <212> DNA  
 <213> Glycine max

<400> 3861  
 agctttgagc cagaatgctg actcactata taccttgatc cagcgtgaga atgccaatcc 60  
 ttatcctcgg aagcaaaaca agaaggagaa ggaaaatttc aatcaaggac agagacgaga 120  
 tttccatcta gaaaaaaagg tgagcagaga aattcccaat caatgagtgg gagaaagaaa 180  
 tgtaggaatg aaaggatatt cccaaccta gaatgggaga aagtataaag agatgaatgt 240  
 tctagatcaa agaaactaga atatatatgc agagaggtct ttggaccgga caatatctga 300  
 acaatacaga 310

<210> 3862  
 <211> 361  
 <212> DNA  
 <213> Glycine max

<400> 3862  
 tgcccagaga aggagtccac ggaggaaatg cttaccattt ctaaagactg gagagcgggt 60  
 tctaagtact cctctgtggc ttccacatca ggcatagagg atgggcagct caccaagatg 120  
 tctttctcgc ctgagacgat gaccagatgc cttccacta cgaatttcta cttttggtgg 180  
 agtgtaagg gaacaactac cactgagtgg atccacgggc gcaccaacag acagctggac 240  
 ggggggataa tatccattat ttggaaagta acttgacagg tgtgagggcc tatatgtact 300  
 gtgagatcga tctctccoct agcctctcgg cgggtgccgt cgaacgctcg aaccaccatt 360

<210> 3863  
 <211> 413  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 3863

agctcgaact cttgcacctc cttgaagttc aaccatgact tctcccaaac tttggcttca 60  
 taaaccttct tttgcccacc atcttttgcc tccaaagtga tgggtgtacaa ggtaccagaa 120  
 accacttgct gtttcgcagt taccaccttt tcaaactcca aaagggcatt ctgcatagcc 180  
 atttacaatt caataaaaaat aaaatataat tcatatttac cacaaaataa aaagaaaata 240  
 gaagcccgtt cgtgggttatt gaaattgacc ctaccaatct atttattcct tgacataatg 300  
 gaaatgcaaa tttatcctaa caatcaatta atttttggtg aacaaaattt tggngggaggg 360  
 gtaatgcccc agtacaagac agaanaagcc tccaagctca aagaacattc aca 413

<210> 3864  
 <211> 425  
 <212> DNA  
 <213> Glycine max  
  
 <400> 3864

tccacaaaag gcatagttat ttccagtttc ctaacaatat caaggaatct cgctagatgg 60  
 cagtctttgt ccttcttgga aggtaccaca ggatatggta cttccgtagc ctcatTTgaa 120  
 gctttttctt tcttctcttc tcttgctttc tcaactctac tcttttcttt cccttcttta 180  
 tttttttcaa ctttttcttt ttcttcattt tctttttctt tttctacctc tatttctttt 240  
 tcttggtcat ttatttcttt ctctctgacc attattgggt tttcaccctc ctgacttgct 300  
 acatttggtta cctcttcttt ctttttctca gtgccatcct ttacaacaat atgtttctcc 360  
 aaagccacct tatectcacc ctcaactacc aaatgcttct tgtttcttgt tatcacaaca 420  
 ttaca 425

<210> 3865  
 <211> 387  
 <212> DNA

<213> Glycine max

<400> 3865

agcttatcac ctttatcggc aattgaaaaa agattttaat gtaagtcaag agcatgatag 60  
tgtgtcgata ccattaactg gtcacagggt ctttaagcagg ccgagggcat caatattgta 120  
tttggaaga cccaagagaa ggaaaaaact aaaacttcca tatggaagaa gaggtcgata 180  
ttgtttgatc ttccatactg gtatgatcta gatgtcagac attgtattga tgttatgcat 240  
gttgagaaaa atgtgtgtga tagtgtcatt agcacactgg ttaacattca aagaaagaca 300  
aaggatgggt tgaataactca ccaggatcta gtttagatag gtatacgaga ccagttacat 360  
ccaaggctctg atggtaacaa aatatac 387

<210> 3866

<211> 426

<212> DNA

<213> Glycine max

<400> 3866

tcttacatag tccgcctttg cttgaccttc tttatgctta aaaacagaaa cattaggcat 60  
aggcaaaaga tcaagaggag ttagtggggt aaaaccataa acaacttcaa aaggagaaca 120  
attagtggca ttatgaacaa ctctattgta agcaaattca acatggggta aacaagcttc 180  
ccaagttttt aagttcttcc tcaaaactgt tctaagcaaa gttcccaaag ttctattaac 240  
aacttttggt tgcccatcgg tttgtggctg acaagtgggt gaaaataaca atttagtgcc 300  
caacttgctc cacaaagtcc tccaaaaatg gcttaggaac ttagagtccc tatcactaac 360  
aatgctcctt ggcaaaccat ggagtctcac aatctcctgt tggatcaagt ggcctcagaa 420  
taatta 426

<210> 3867

<211> 282

<212> DNA

<213> Glycine max

<400> 3867

ctgcgcttcg agtgacacct actgctactt cacatttgat ctcaacggca gggctctctt 60  
gcttttggcg ccgacagatt cttcacactc tcacctgata ccacaatcgg ttctcatctc 120



<210> 3870  
 <211> 431  
 <212> DNA  
 <213> Glycine max

<400> 3870

tcttcattgc actaatgctc tcccttgaaa cagctccttc aggccatttt agatgtgatc 60  
 cacgcttgaa atatTTTTct gcacccttgc tacatattga agagcaaag aataaaaaag 120  
 aagttactac atttaaaaaa tatatattaa tgatagggtt tatacaaaag gtataaacac 180  
 ttagtcaa atatttataat ttaattatat tttaaaatat ttttaaaatt tactaattta 240  
 ttgtaaccac tgtaaatattg gatctttaat ggaatcttaa atattctaac cactaataat 300  
 cagtctttat ttattgataa gaattaaatc caatatcaaa gatttacaat tttccacgt 360  
 actaagactc atttgatagg ctaataagca gcctaataatc atacttaaaa aattataata 420  
 aaaaaatcaa a 431

<210> 3871  
 <211> 375  
 <212> DNA  
 <213> Glycine max

<400> 3871

gggatcctct tagtcacctg ctgcatgcaa gctataagaa attttgcaac atcgttttgg 60  
 atatttaaca agaacattct atttcttgac attggtacct tggttaattat attatttctc 120  
 ccattctctga tggaaagact ggaatctttc atgtgaatat catagccttt tttgaggaat 180  
 tgtcccaaac tcaaaatatt gttcttcata tttgggacgt agtagacatt tgatatgaat 240  
 tcatgtcttg catccttcaa atggattatg atcttacctt tttcctttta taggaatatt 300  
 ggaattatta ccaaattaag cattgccact tactgactca tcaagatcca cgaaacatgc 360  
 ttctttttcca cacat 375

<210> 3872  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<400> 3872

tcaaccttcg gtggctcttt ctgctccaaa tcgtgaatga aggacatttt cggagtcgtg 60  
aagcgcgtct ctacgtgtgg gacttcgaaa tttcagggtt ggggtggactt ctttctcctt 120  
tgattttcgt gggatatggag ttttgggaga tatgatgggt agtcttgcta gttttctgct 180  
tcatgatagt tatttgtgaa gaaacttggt gaaagcatgt tgaaattgcc atgtttggaa 240  
gagttaaaca taccattctt gttttagggt ttttatgatg atgcttgtga tgttcatgtg 300  
ctgaaattgc ttatggaaaa ctggttagaga tgaacggtat aattaaccta cggttagaaa 360  
gtgaaaatgt ggtgttatga gtggaaaaag agtgaattgt tga 403

<210> 3873  
<211> 416  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3873

agcttatatt ttactaaact tcgntgtgta tttaaatatg anaagaggat tntgctatcc 60  
ctaaaggaaa gaaaaaaaaa atgaaaatac ggtccttgag tgttgtcagt gaatgactat 120  
gagtgcacat gtgagagaaa attggtagtg taataaaaaa attcaciaaac aaccttaaac 180  
agtaaaacaa atcatccaac accgagtgat aaaatataaa ggtataaagt atattatatt 240  
attacttaat atatttaata aaataaaata ataaaaatat gtttttatca agtgtgggtg 300  
atcactgttc ttctgtcttt ttgtgggaat aactctgtta ttaatatacc ttcttttatt 360  
gaaattaaaa gaacgaaaaa taaagggaag aacaacgact accaactttt ttttac 416

<210> 3874  
<211> 414  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3874

ntaagctctg cagtttatct tattaataga gttccctcta gtgtgttaaa ctttaagaga 60  
cctcttgatg tcattttctca tcatttcacc cttaatcttg tcaatcattt accaccccat 120  
atctctggtt gtcatatatg tacattcgca tcctcaccaa caaacaaaat tagaatctag 180  
agcaatgaaa tgtgtttttg tgggatacaa caccactcaa aagggatata aggccatatca 240



tccatctaca aaaagatttt ttgtatcatt ggatgttaca tttcatgagc atgaaatggt 300  
 ttttcccttg aaaacacttc attcttcacc ttatagggga ggtgatttgg aggtgcagaa 360  
 tcatgataga cttgaccaag atatcagggtt atttgatatt atgccaacaa caac 414

<210> 3875  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<400> 3875  
 agcttataaa aatggatgat ataaagaatt tgaagaggtc atcagatgac ttggtatttt 60  
 tagtttcatt ttttcccaag aaataacgtg tacctttcgt aaaagaattc tgttttcgtc 120  
 cttttgtaag gaaaaaaaaa aaaagagatt ctgtttgaat ttgattaaac tattttctaa 180  
 aaaaaaacta ttatgaatga taactttttt cttatcttaa tattttgttt tgctatatat 240  
 taagattcta actcaaaatc attaaacttg tttataaaat aagtatcttc tacttccatc 300  
 ccagtaaaaa tcccacatga aggagttaag aaagctagat tactttgtga ctcttataaa 360  
 tataattaag atgaatatta cgaacacatc ctatgggttt atc 403

<210> 3876  
 <211> 292  
 <212> DNA  
 <213> Glycine max

<400> 3876  
 tagctaataa tttccacagt gaatgacttt tggttaaattt taatagaatt agacattaaa 60  
 gtgggtaatt acaatctcga actaaagatt tattcatttg gtaattatct aaacatggac 120  
 aatactaaat ttcctattca ttttatctca tttcatttca tttcagctc ctttccaaac 180  
 aaaggcaagt aaaaaagggg gtttgacatc ctaactggat aatcgtaacg acaaacaccg 240  
 cgagtattta cagcttgact gttgtacgtg cttgataagt gcacaacgtt ta 292

<210> 3877  
 <211> 390  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 3877

agcttgtagg gttaaagtct cactgattgtc acgtgttgat gcaacaatgg ttagtcgtgg 60  
ctatacgaga catcttgcca aacaaagtca agttagccat aactcgctg tgctttttct 120  
tccatgccat atgtagcaaa gtcgttgatc ctgtcaagtt tgatgagttg gaaaatgaga 180  
ccgcaattat actatgccag ttggagatgt attttcccc tgctttcttt gacatcatga 240  
ttcacttgat tgtgcatctg gtcagagaaa tcaaatgttg tggtcctggg tatttgcggg 300  
ggatgtaccc ggttgagcga tacatgaaga tcttaanagg gtatacaaag aatctatatc 360  
atccagaagc atctattggt gagaggtaca 390

<210> 3878

<211> 401

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3878

ntgattccta gnaaaacccat gatttctttg ttagcccaat catgttaca gctaataaa 60  
gtccgtagtg atccacattg agcatgtaca tagcattgac tgagatgatg tgcaaagttg 120  
ggaattttta tattcagttg ttataattca aacactttta ccgagacact tatgggattg 180  
agagaaacac tagccttggt ggtaaaatta agcccaggaa agcaagcgaa ttgaggaaag 240  
aagggtctaat taagaaaaga agactaattg aggaaagaag ggctaattaa ggaaaataga 300  
atatttaagg aaattaggct aattaaggaa agaatgacta attaaggaaa tcagattaat 360  
tcagaagtc actaatctgc acctataana gaagaagaga g 401

<210> 3879

<211> 351

<212> DNA

<213> Glycine max

<400> 3879

agcttctact tatgtggcag ggcggtgtt cttcaccttc ttgtctccaa cgggaacttt 60  
gaccattggt cttccttccc gcgatgtcc ttttcatgtc tgcttgagtg ggcttatagc 120  
ctaaaccata cttcccacga ttaccttggg tatttatcag tctagttatg ccgccattgt 180  
tttttctaa acccatcccg ggctcataac cggtcccca cataactcgg gccatcatta 240

ccgctgcac ggacagacta tgctgccc aa agaggagtc cacagaggaa atgctgacca 300  
cctcaaaaaga ctggaaagca gtttctaacg attcttctgc ggcttcaca t 351

<210> 3880  
<211> 416  
<212> DNA  
<213> Glycine max

<400> 3880

gtgcttgtag aatctccctc tttttgatga tgacaacttc tgaaatcaag aaacacacac 60  
acacacactt tttcctagtc gatcactcac ataaatttcc attctcccc tttgtttttg 120  
aatttatgct tcacttaaaa ttaagttaat tactcatgtg agttcttgat ttaatcccta 180  
tttctctccc cctttggcat caacaaaaag ccaaagtgcg taacaagtat gaaacatata 240  
aatacaacta gtcattcaca caacaatcat ggaaaaaata taaactaatc ataccagaga 300  
acagaaaaca attaagcaag atattttaac cattcatcaa acttagaaac gttaagaaat 360  
ataaaaacca tacataattg acatacccca gaatagaaaa acaatcaaac agatat 416

<210> 3881  
<211> 459  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3881

attgttcccc tgtccggccc gggatcctct gagtcacctg ttgcatgcaa gctttatgag 60  
aaaccattca aacatatgta gtttcttcac aagactgaat ggaggacgct ttagtcgaga 120  
gaccaccttg aataaccttt attccaacct ttcaagttag aggaaagagc tgatcgagta 180  
agtagggcac ttagaaaaac taaatcccta attagaggcg gaagtgcacac tcatagcgaa 240  
ttactaaacc agattactag tttgcttaag gtcaatgcag atacgtcccc agcttctgaa 300  
aatacttctc aaatgggaac gagacgatcc ttcacaataa ctaacggcat taatgaagat 360  
agtgaccgag actacataac cccactgata taggaccagt gtagtaaaga atataagtct 420  
taaataattcc aacactggaa accccctcca agaatan 459

<210> 3882

<211> 359  
 <212> DNA  
 <213> Glycine max

<400> 3882

tatgaagcct atttcgcgcg gctatctacc atacgtgtgt tgcattctata ctatgacacc 60  
 aggtatgaga acaatgcacg aattctaaaa tgcaaacactt agcatacagg tcaatttggt 120  
 aagaccatat agcaattgaa ttctaatacga tatataacgc attttatata tattcatatt 180  
 acccaagagt ctacttttgc aatataactt tattgttatt aaacgttctg tgcattcacac 240  
 aaaggaaaaa actatgtgta gtatgtcaca gatgatatac gtaaacagca tgtgtgcaca 300  
 aacttttcac aacaaataat ttacaactga ctctaagagc ccatactcat ggaggatat 359

<210> 3883  
 <211> 388  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3883

agcttgtcaa anagggaagc aagttaataa ctcttttcaa agtaaaaacg ttgtttctac 60  
 ttcaaaaccc tttgaactac ttcacataga cttatttggt gcctctagaa ctatgagttt 120  
 ggggtggaat tactatggct tagttatagt agatgattac tcaagattca catggacttt 180  
 gtttttgaaa accaaagatg aagcttttga tgggttttgc aaacttgcca aggtcattca 240  
 aaatgaaaaa aggtcttaac attgtttcac ttagaagtta tcatggaggt gaatttcana 300  
 atgagtctct tgaaatgttt tgtgaagaaa atggaattca ccacaacttt tctaccctaa 360  
 gaacacctca acagaatggg gtcattgga 388

<210> 3884  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<400> 3884

tgaaggtgtg tagtccacca tcttttcata gtagaatact agtaatgtgt ctactatcat 60  
 tgttatcatt ttttctccgt cattgagggt ccacttgagc ttccagggtt ctttaccttt 120  
 gggcgatttc tttgaaagat ctgtgcccct ttttgacat gttctgttgt tgcattctat 180

ccggaaccat atcaaaattg tactgatact gcctaacgaa ggcaaccatt aggtccttcc 240  
aagagtggac tcgagaaggt tccaggttag tgtaccaggt aacagctacc ccagtaatat 300  
tttcttggaa ggaatgtatc agcaattcct catcttttgc gtatgcccc atcttccgat 360  
aatacatctt tagatggttc ttggggcaag tagtcccctt gtac 404

<210> 3885  
<211> 401  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3885

agctttncac attgaattca gcacctaattg tcatattaga tggagattgg gtatcttaac 60  
ataagagatt tcagatggac tttaatccta agcccacagc cgaccttttc acgagatctc 120  
tacttaaccc tgtggataaa tgatcagccg aattatgctg agttctcaca aactccactg 180  
atatcacacc atgcatgatt aactcccgaa ccatgttgtg tctaacaccc aagtgtctag 240  
actctccatt atacacttga ctatatgcct tagccaaagt taatatgggg taaccttatt 300  
ccttgtgtta ggaattcagt tcaacaagta acaggctgtc aacatagcct caccataa 360  
tccttcactt acaccgaat aggataacat ggaattcacc a 401

<210> 3886  
<211> 411  
<212> DNA  
<213> Glycine max

<400> 3886

tgtcatagta tgacatgtgc agatgaataa gattaggagt aggcgatcca cccgcaaaga 60  
acgagtcatt aggacaatga gttatgatca aatcatgaag aagtgagaga ctctagtaag 120  
catgttctac aatatataga aacggatttc aaattcttac aattagaaat tctaagactt 180  
ttaagcacag agaaacaacc taaggtgaag gaagtcagtg aataacatct attaaatatt 240  
gtcaaattct ttaatgatgt gtaattgtgt aaggattcat aaggtaggaa ctccaatttc 300  
tcacaattaa gtagagtaag agattgcaat gcattcagca gaccatctct taaggatgct 360  
acggaattaa cgccagagat agttaagtct atgatgaaat aggcggactc c 411

<210> 3887  
 <211> 472  
 <212> DNA  
 <213> Glycine max

<400> 3887

tgcacatcat tccccgagtc attcatccgt atttgatgtc gatgcagcat cgaagaacag 60  
 aattgccatt ccttgatta tagggttgaa ccaagctaata gctattataa aaaggttcat 120  
 caagacgagt ggaattatgg aagtaaccgc ctggcaaaat tggggcaaaa gatgaatcga 180  
 gtcacatcaa tgcttagtct acttccaaac atatatagga ttattgatgt ccttgataat 240  
 tccagttcct ccttgacaaa gatgtaatgg accatgttga aaatataaag tgattcaacc 300  
 ccatatgctg tgtaaataat cccaatactt atactgcaca tcattcgcat gcatccatgc 360  
 ttttcattgg ttgcaattgt taaatgcact ctttccttga aaaacaaaat aaaatgaact 420  
 taatcattgt ttttaacaaag gaatgggaca cgctttacga cgcccttacc aa 472

<210> 3888  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<400> 3888

cctaagattg gttgtagaat tctctaagca tgaaaatgag gacttggatg aagacttgga 60  
 gctggccctt gattgggtact ctggcccctt tgacacgagg gaaaagcttt acaatggagt 120  
 gtatatatgg gggcctatat taggggcata aaattcctcc cctagtatga ttaaattggt 180  
 ttcttaaatg catgtatgat agcatggaat gcccttatga atgcaaatgt gggcaagaag 240  
 tcattaactt tccggaatgc atatggataa atatgagtga gacaatcaaa atttggtgccg 300  
 ggtacttcaa atgtgttgaa atagtttggg ataaccaaata gtttaagatg taaattatgt 360  
 gccagtttg acgcagccct ttgcgcatga aagtgtggtg ctctttttta caatgtt 417

<210> 3889  
 <211> 614  
 <212> DNA  
 <213> Glycine max

<400> 3889

agcttgataa taacttgaag gtttgatca taaatgaata ctgtggaagt tatcactaaa 60  
cacgcttata aatgagggaa agaaaatttc aactcagcgt tttgtataat tctgctacca 120  
taacttattt tagcaacata gtttacgaga agataagaaa gaaaaggaga aattcaggat 180  
aagacgagtg acataattat aatttatgta aaaatattaa aacgagttca aaatgaattg 240  
gtaaacaatt tattattaat aatataatcat tcatataatt actcttatta tataatattt 300  
tccctttatt tttttatata tcacatgaat aacaatatta ttttatattt tattcttttt 360  
cttttttttc ttttttttta taaaaaatac taacaagtat ccttaggata ttagttactg 420  
aattaaaaaa aaaattcttt tacattctct cctcttctat aattttcaca acaaataata 480  
tattttcttt caattcttta ccaattttat aagaatacta ggcaaagaaa cccttttctt 540  
atttcattta aaataattat atatatttat tgtgtaataa atacaatttc tcttaccttt 600  
aatttaatga attt 614

<210> 3890  
<211> 532  
<212> DNA  
<213> Glycine max

<400> 3890

tgacattcta agacgatcat gatgtcaata ccgtctttga aagttgagat tttctaagac 60  
ggtgtccctt cgaccgtcgg taaaagttag acactttcaa cgatgttaga ttcaaagacc 120  
ggcaaacacc ggcattgttt gtctctttcc acccgcttg aaaccgcttt ttctaccagt 180  
gccatcaagt atcaactaat aaagaattga attattccct ttaatccttt tcataaaaaa 240  
taagtaattg tgttaaaaaa tactactatg ttatgacttc tttcgtaatg attggaacta 300  
atatgcaagg cttaagcct tagtttcttg ttttttttcc tcctaaaagt gatttttgaa 360  
agttatccaa acagggcctg agtatgtttc tgtgattgcg aatcaattca tgttttatgt 420  
ttcagaccat taatggaatg ttctgtatgc atgcacagag ctaagtttat ttagttcaga 480  
aaagggata gtgagtcctg gaaagatgat gcttgccatg tccaactaca tt 532

<210> 3891  
<211> 312  
<212> DNA  
<213> Glycine max

<400> 3891

agcttatgct gcaaatatTTT acaatagacc tcctcaacct cagcagcaaa atcaaccaca 60  
gcagagcaat tatgacctTTT ccaacaacag atacaacctt ggatggagga atcacccTaa 120  
cctcagatgg tccagccctc agcaaacaca acagcaacgc tgctccttcc ttccaaaaag 180  
ctgctggccc aagcagacca tacattcctt caccaatcca acaacagcaa caacccca 240  
aacaaccaac agtttaggcc cctccacaac cttccctcga agaacttgTg aggcaaatga 300  
ctatgcagaa ca 312

<210> 3892

<211> 613

<212> DNA

<213> Glycine max

<400> 3892

aatgggatgg gaaaaatcat ctccttaatc ctgactaaaa tggttccatg aagaaagcaa 60  
acaatacact ctttctaaca cacattttac tatttgTtaa aatttattga aaacaataaa 120  
atcgagggag agactcttta aataagaaat gagacccaaa aaaatttgTg atttctaata 180  
aatttcaact aatagtagaa tgtgtgttca aaaaagtGtG ttgctagcat tcctcatggT 240  
tccacagata caataatgtt acagtttctc tcagcaaaag gaacagtctg gtgaagaaat 300  
gtaaaagtca acagctaaat tcaagggtat tttctcttaa caggacatcc aagtaacaat 360  
agccaaagta ctagaataat aataagccaa ctgcttatta taagttacat taattcaaaa 420  
gtcagttgta ataataagtG aaaacttatg tatctttttt gtttctacat gtttcaactaa 480  
atatgatcat ttgagttttg tttatatcac aacttcatgg tactcaaaac caaatgcaat 540  
gttgatgacc ctcaatcatc ctttagTtaa ttacttaatg ggaagtcttg tgcaaatgaa 600  
attatctaca tta 613

<210> 3893

<211> 629

<212> DNA

<213> Glycine max

<400> 3893

agcttgaagG taaactagat gccttggtta acctggtaac ccaactggcc atgaataaaa 60



aatctgcacc tgtcgccaga ctctgtggtt tatgctcttc taccgatcac cacacagacc 120  
 ttttcccttc tatgcaacaa tctaaagcca ttgaacaacc tgaagcttat gctgcaaaca 180  
 tctacaacag acctcctcaa cctcagcagc aaaatcagcc acaacagaat aattatgacc 240  
 tctccagcaa catgtacaat cccggatgga ggaatcatcc caaccttaga tggtcgaatc 300  
 cttcacaaca gcagcaacaa caacaacaac cttattttca aaatgctgct ggccaagca 360  
 gaccatacgt tctccacca atccaacagc aacagcccca gaaacaacaa acaattgagg 420  
 cccctccgca accttccctt gaagaacttg tgaggcaaat gactatgcaa aacatgcagt 480  
 ttcaacaaga gaccagagcc tccattcaga gcttaactaa tcagatgaga cagttggcta 540  
 cacaggtaaa tcaacaacag tcccagaatt ctgatagatt accttcttaa tctgtccaga 600  
 atccccaaaa tgggagtgcc attacattg 629

<210> 3894  
 <211> 707  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3894

ctctagcttc atgatgaatc aagattgatt caaagagttt tgatgatcac aaagatgatg 60  
 acaaaaaggct caaaagtcaa gaacacttca tgataacaaa gatgatgatc tcaagaatca 120  
 aagaatgagt tcaagattga atcaagtaca cttcaaggat caagaggaaa gttgaattca 180  
 ataatacaga atcaagtttc aagattcaag ctccaagaat caagatcaag attcaagact 240  
 caagattcaa gaatcaagag aagactcaat caagataagt attaaaaagt tttttcaaaa 300  
 actaagtagc acatgaattt ttctcaaaaa ctttttatca aagagttttt actctctagt 360  
 aatcgataac caaattattg taatcaatta ccagtagcaa aatttttttc aaaaagcttt 420  
 caattgaatt tacaatgttc caattgattt caaaatggtg taatcgatta caatgatttg 480  
 gtaatcgatt accagtatgt ttgaacgtta gaattcnatt taattgtgaa gagtcacatc 540  
 ctttcacaaa atagctttgt gtaatcgatt aactgattt gggaatcgat taccagtgat 600  
 agttttctgaa caaaatcaaa agatgtactc ttccatagat tttcaagggt ttctaaaagt 660  
 cataactttt ccaaagtggt tttaagtttt tctaaagggt ataactc 707

<210> 3895  
 <211> 616  
 <212> DNA  
 <213> Glycine max

<400> 3895

agcttgagtg ccttctgtta ttaacttgat ggctgatgtt gaatcagatt cacaaactaa 60  
 gtagcgtaac gattagttaa ttgttctgc catttgtcca ttgaccaata gattagtcaa 120  
 tattaatgaa tattggatta gtgggttttg ccattagtca attgacatta aaattgcttt 180  
 aattttattc aattccaaca aaaatattga taaaaactaa aaagaattca ttaatatattg 240  
 agcaaatgta aaatacattg gtcaattatt gttttgtag atgcattcat ccatcatttt 300  
 atcattcgta cactgtaccc aaaaaaattc tatgaatcgt cttgctgtgt tattcatttg 360  
 aattcagacc atcctcttta gtttcctgtt cataccatac cttgataaaa ttagatgttg 420  
 gaccagaag tattattggg gtaatcattt aatttcattc tatacatatc atctaaactt 480  
 gatttaactt tcgagttgtt aaacaatatc atgtatattg aaaaacatct atttaaagaa 540  
 atcaacacct taaacaatca tggctttgaa gcatttctac tacttggctc atgggtgggtc 600  
 tccgatcttt atttac 616

<210> 3896  
 <211> 640  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3896

ttcaataacc cttccactc acttacagga agcaatgaat gatgaaggga acaaagttaa 60  
 cttgtcataa aaagtttgtg ttctatttaa tgtaactatg cttaaattttc cttatcataa 120  
 ttgtcatgat gtagaattgt agttgattca gaggaatttt ttattttacat tttatgcata 180  
 caatgcaatt tgtcatccat actcctatct attcactgat aataataaaa aaatactcct 240  
 aagtcctatc tattcattta acataaaatt tctaaaacga gaattattag gttgccgttt 300  
 cggcggtttg gttggcttta ttgtgtcgtg caacactttt gtatgtcccc tctttcaatc 360  
 taagacgcca cgacatagat attcaattca gttttcactt taactttgta ttatactctc 420  
 aagtctcaat cttttaaatt atttttattt ggtgtataat gccagcaacg gaatttgaac 480



aaaagaacat ttggataaat ctaggatttg tgctctctta gaatct

526

<210> 3899  
<211> 394  
<212> DNA  
<213> Glycine max

<400> 3899

agcttgatca aaactcgaag gtgggtatca gatatttttt ctgcggaagt tatcactcac 60  
cacgcttata gatgatggaa agaataatttc aactcacggt tgtgtgtaat tctgctacca 120  
taacttattt tatcaacata gtttacgaga agataataaa gaaaaggaga aattcaggat 180  
taaaccagtg acataattat aattgatgta aaaataataa aaacagttca aatgaattg 240  
gtaaacaatt tattattaat aatatatcat tcatataatt actcttattc tataatgggt 300  
tccctttatt ttgatatata tcacatgaat aacacactta ttttaaattc aattctttgt 360  
cttgattac ttttctttga tagaaaatac taac 394

<210> 3900  
<211> 276  
<212> DNA  
<213> Glycine max

<400> 3900

gatattctta gacgggtccc ttcgaccgtc gttaaaaggt aaacactttc aacgaagtta 60  
gattcaaaga ccggcaaaca ccgtcattgt ttgtcttttt ccaccgacgt tgaaaccgct 120  
ttttttacca gtgccatcaa gtatcaacta ataaagaatt gaattattcc cttaaatcct 180  
tttcataaaa aaaaaactca ttgagttaaa aaaatctact atgatatgac cttccttcct 240  
aattgattgg aactaattat gctaggcctt taagtc 276

<210> 3901  
<211> 632  
<212> DNA  
<213> Glycine max

<400> 3901

agcttgaatg tccaaagagc aaagtctcca acaaaaatgt agaaaaaatt aacattcaat 60  
taaaccaaaa accctaaaaa tgtgaaaaca cgtcttagaa ttctgcatag attttagatt 120

aatatgcaat tttgaatatg tgatatatgt gaaaggaact tttaatcaca ccgtaagtta 180  
 taaaacaata ttatttagtt gaaagttata gaatggtata ataattgtca atgttacact 240  
 ggtgtaattt gatccttctt tatatattaa agtttttagaa ctcccccttga gtccaacatc 300  
 ttttatgtat gctcagtaag atatataaga tcaaagtgga catgcataca tatgtaaaaa 360  
 gcatagttaa gaggcgaaat tgaataatcc aaccaactca tttataaaag caacataaca 420  
 tatgttacia catatatatt acaacaaagc atataaagat gaaagataag tctaagctca 480  
 tgatacatca aaattccaat ttctccctct tatgtaatca acaaatacag gtttgaaaga 540  
 tggaaaatga taaactatca ttatcattta tggctgctga ggtggatctt catttcgtgg 600  
 tgaatttgga tgtggatggt aaagttgatc at 632

<210> 3902  
 <211> 594  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3902

cgctacattt tacatgccaa tgaactagca cgacgtctta aggtatgcta acattttatt 60  
 attttgtatc ctatctctt agtctgagt tagatgttac tctggtgaaa gagtaaatta 120  
 atagtttttt tttttactat tatgtggcat gtagttgggtt attgatagct acaattgatc 180  
 aaaaaccaat tatggatatt ttacaataaa ttaatccttg agcccttcgg atagatacga 240  
 ttagtttttt attgatcgta tccttatctt ttctgtttta tttttcctac cttgtctctt 300  
 gaatctgaag tgtaatcaga ttgggttataa aatctctaac caactctgcc tataaatctc 360  
 aatctttgaa aatttgaatg aatatgaaac aaaattatct ttcttcccct anactacaga 420  
 ataaaacaat tttttgtctc ggtacctgca ttgctatttt gcaggcactt ctagttaaac 480  
 aaaaaagaaa catttgaaaa tgatgacttg aatcgaactt ataaaatact taatttttct 540  
 ctcatctcac tttatttttt aattttttgt tttttcattt tattttcttc tttc 594

<210> 3903  
 <211> 427  
 <212> DNA  
 <213> Glycine max

<400> 3903

agcttgcccta attaacctga agttgagaga gaatgattat taaacacaca aaatagatgt 60

atgaagtagc tatagtatat tctggacaaa gcgtacttat cgtactacac aacaaccata 120

aattgggaaa gcttgatata atttacacag gtcttatacg caaaagatgc tgcgtattta 180

ttgactaaca ctaagcatat catgggtattc tctatacgcg cgctaggcga gtttgtaccg 240

ttaaccgccc agcccatttt tgtgaggatg aatctacttt cactcttgag agaagaactg 300

tttaattatc tctcctgtga ttcttttgat gctgatggcc acgatgaaaa ggaaagcaaa 360

tcttatggac ctcaggaacc atatgacact acgagattca tctttgaggt tgcgtgggaa 420

cacttca 427

<210> 3904

<211> 548

<212> DNA

<213> Glycine max

<400> 3904

tgtaatcgat tacacacata ctgtaatcga ttaccagagg agtttttcag aaaacattct 60

caacagtctc atctttttat ctgattctta aatggccatc aaaggcttat atatatgtga 120

cttgagacac aaatttgaaa agagttttca agaacaaaaa ggtcttatcc tcttaaaaag 180

caaaatagtt ttatcctctt acaaattcct tggccaatac acttgatgatt caataaggaa 240

ttatttgagt gctcaaaatg ttcaatctat ctctttcaag agagattact tcttctcttc 300

ttctttattc tgaaaaggga ttaagagacc gagggctctt tgttgatgaaa agaattctaa 360

acacaaaagga aggattgtcc ttgtgtgttt agaacttggt aaaggaattt acaagatagt 420

ggaactccca agcggattgc ttggggactg gacgtatgca caaaggtgtg gccgaaccag 480

tataaatctg agtatgcact ttctcttccc ttaaactcct ttatttatta ttgatttata 540

ttcatatt 548

<210> 3905

<211> 544

<212> DNA

<213> Glycine max

<400> 3905

agctttgata cttacagctg atgcaataac cactgtctgc ccaacttcaa ggccatttat 60  
 tccagcatgt atattgatgg aatttgtgca aaaaacagcc aagagcccca tatatagttt 120  
 atacatccat cctgccccat aaaacaaagt caaaatagtg aatctttaca gtaattagta 180  
 ataactcttc aagtatcatt tacataaagg tacaccatca atatggaagc tcagaaatga 240  
 cattatcttc aacaatcatc cttttgtcat atcgaggctg ttggacaata caattttcct 300  
 ctcttggtct tggatgaggg ggtgggaaaa ggattttaat gttccttttc accaatggtc 360  
 ttcatctatg gctttggttt ttaagtagtg atagtgttgt tgggttgggt tgaattgttt 420  
 ctgctgggat gttgcataat tttatttact tttctgtccc aggagaacct acctcctgtg 480  
 gcttcttgta atacctctgg tactatgtat cttctattct ataaaaaact tcgtacccca 540  
 ttgc 544

<210> 3906  
 <211> 570  
 <212> DNA  
 <213> Glycine max

<400> 3906

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 gccatgcttc acctccatca agagcactca actgatgttc aagtacctta aaaaacatca 120  
 caactcagct ggagaaataa aaactaggct aacccttagt cacctcctta accccgatga 180  
 agatgaagct tagctatgtt tcagtgtttg tttctcttgt ctatattgtt tgatggtttg 240  
 ttatgttctg ttttgttacg tttgtctttg cttgatgaaa gttaagtttt tttgtaagct 300  
 ttatgattaa aagttgtaat gttccatgat taatgaaatg ctatggtttt atttcccttc 360  
 aatttttttg tgttctgatt tttgtgtata gttcaaacat tttggccttg ttaattctaa 420  
 aaggcggaga tgaactagca tatttgctcg cattgcataa gcatttgga ataacttgca 480  
 ctagcattag taaaattata tagtatgata tatgatgatg atgatgataa gaaatgattt 540  
 tttcttaagt gtaagaattt taggatgact 570

<210> 3907  
 <211> 464  
 <212> DNA  
 <213> Glycine max

<400> 3907

agcttccatt gttgagtttt tgcttccctt ttcacacttc atttactcc ccacaagtaa 60  
gtgcactttc ccttggttat ttggtctctc cttgatgtgt tttagtgett tagttgctca 120  
ttttttgcga aattcgtgaa gcaattcaca tgtgaatcca tgcttgtttt cgctaaatta 180  
aagggttgta agggatggcc ttaagcctat gttgcattct ggagtaatgg ggcatgccac 240  
attgccccca ttctcttgca cctaggtagc atggaaaata cctttcaatg gtatgtatat 300  
atgcgaatat atatagcatg aaaatgcctt gcaaagtgtg tgaatatatg gcataaaaat 360  
accttgcaaa gtgtgaatgt ttacaaaata aatgcatttc aaaaaaatt tgtttttttg 420  
tgtgggtcgc aaaaagaccc tttaaaaaaa aatcccttt taaa 464

<210> 3908

<211> 316

<212> DNA

<213> Glycine max

<400> 3908

tcatgacgaa tcaagattga ttcagagaag ttttgatgat aacaaagggtg atgacaaaaa 60  
gctctaaggt caagaacact tcctgataac aaaaatgatg atctccacaa tcaaagaatt 120  
agttcaagaa gttcaagatt gaatcaagaa cacctttatg tttaaaaaga aattttattt 180  
ttagaaacca gaatcaagtt tctagattct cgaatcaaga tcaagattta agactctcga 240  
ctcttgattc tcgaatcaag agaagacttt ctctcgataa gtttgaaaaa gttttttaaa 300  
aactgagtac cccatg 316

<210> 3909

<211> 362

<212> DNA

<213> Glycine max

<400> 3909

agcttggttaa acgattctat gaaccatact ttgttttgga ccaaattggc aaggttgcat 60  
acaaacttct attgcctgaa agatcccgca tttctcctgc tttccattgt tccttcctta 120  
aacccttcca ccaatcatct gaagaagatt gtgtccact agcattgcct tccaatgatg 180  
ttgaaaatca accagttatc tctcttttaa ccattctggg cactcattag gcctctgaat 240



ctactgatcc aaagctaagg tattaattca atgggcaggg ttgtctcttg atgacattac 300  
 atgggaagat tgtgaaaaac tcaagactgt ctatcacctt gaggacaaag tgtttttttg 360  
 at 362

<210> 3910  
 <211> 536  
 <212> DNA  
 <213> Glycine max

<400> 3910

tgcattgattt acagaatttg tcttttatat ttaatatctt gttttatttt ataaagaaaa 60  
 taattatttt tatcattggt tgatataata tgggtctctat ttataaatca agacatctag 120  
 tttccttatt ttccaaaata agcaatttta gtccatcag ttgaccatcc aaagtctaata 180  
 gttgacttct atgtgacata ttgggtgctga tatggaactt atgtatgcaa atgacatgac 240  
 acttatgtga aaaaaaatta aatgacgtga ataataaaaa aacatcttaa tatgaattaa 300  
 acttggtgacc ctttattcat agacaatgga ataaactact aatatactca atttgtctac 360  
 ctaaatatat tactattatt ctctatgtat tcaatagtca agagttatat tttttttgca 420  
 gattatcaaa atctataaat taaaaatatt taatatataa atctttttta tcttataata 480  
 tataaattta tatgtttcta ttttgaataa tttaccatct aattttttatt tttacc 536

<210> 3911  
 <211> 369  
 <212> DNA  
 <213> Glycine max

<400> 3911

agcttgccgc cacggagttt tccgactatg ctcttggtgtg gtggaacaag ctacaaaagg 60  
 agagagcaag aaatgaagag ccaatgtgat gtgaatctta cggggcgagg atcgcttgat 120  
 acaggctgta tagttttttg atgacgccac tttcggtgaa ggaagataag tcagggtaga 180  
 cgccactttc ggtgaaagaa gatgactctg gggtttatct acttctctgtg aaggaagata 240  
 attcccgggt taccacacat ggattaccct gataaggctt gaaattgggt ctacaaagga 300  
 acccataaag aaacttcttt ccaatattat gaaaacgtcc caagtttttt tttttttaaa 360  
 tataaaaac 369

<210> 3912  
 <211> 496  
 <212> DNA  
 <213> Glycine max

<400> 3912

ttggctctat tcaaatagcc ataacttttg acatgggggt actattgagg cccatgatat 60  
 atcgagaggc tcgaaattga aaaatggaag ttctcgagaa attcaaattg tcataacttt 120  
 taacttggat gtccgattca cgcacataat atatccagac acacaaaatt gaaaaatgga 180  
 attctcgata aattcaaattg ttcataactt ttgcttcaa tgtcagattt aggcgcataa 240  
 tatatcgaga cgctcgaaat taaacaagaa agctctgggt caattcacac ggccataact 300  
 ttgacatga gtgtatgatt gatgcccattg atatataagag acgctcgaaa ttgaataatg 360  
 gaagttctcg agaaattaaa attgtcataa cttttcactc ggatgtccga ttcagacaca 420  
 taatatatcg agacgcttga aacctaaaca ggaagctctg gtccattca gagggccata 480  
 acttttgaca tgggtg 496

<210> 3913  
 <211> 543  
 <212> DNA  
 <213> Glycine max

<400> 3913

agcttgtgct tgttttatta aaattcctag gatcatgagc aactaggtgt gtctacaat 60  
 gacttgcgaa acaaaagggtg atcaaataac aagcagagat ttaaaaggta ctaggttgcc 120  
 tcctagtagc gcttctttaa cgtcttgagc tggacgctg atgacttgtc gatcacggac 180  
 ctagtacttt gcttaccttc ggctttggac ttggtcacct attggtcgac catgtgtcgt 240  
 aggcaatact ctaacctttt tgtggatgag ctgagggggt ctataggtgg cgacgggtgca 300  
 tttattgcct gttgctggcc atccccaggc tgctgtgggtg tttcgcttg cacctgctg 360  
 ggggcgcagt acttcttgat gaaagctcga ttagtagggg acctgatgac cttgccgggg 420  
 gtgataggca ctctgtagaa atgacagagg cccgtaatca gagctggaaa cccagggacc 480  
 ctgttggact tctttgggtc cactgggtgt cctatgtcac gatggcatga tcttgctggg 540  
 ggg 543

<210> 3914  
 <211> 555  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3914

tgccgggca gtttaagcaag accgaagata atatttgggc catcatcgac cagtacaagg 60  
 aaaaactaag cctaatagtg actcatgaac caaagctaga agatgaatac accaagggtat 120  
 cagtcttgca agcggaaaaa gaagcaaggg aaaagggtgat caattcattg cacaaaaaag 180  
 caatgatgtg gatggacaag ttgccttta ctttgaatgg gaatcaagag cttccccaac 240  
 tgctaaccaa agccaaggca atggtagatg tgtactcggc tcccgaggaa gttcacgggc 300  
 tccttaatta ttgccaacac atgattgatt tgatggccca cataattaag aaccgctaag 360  
 gcaattgtat ggttgctttg attttgatta aataaacctt ttttgttccc taataaaatg 420  
 aggttgattt aatcctatgt gtttaaaact ctgtgtgaat ccaatacttc gacaacttat 480  
 ctttagcatg cattncatgt ttgtttttat cgcattactc accgcatttt gttcctctag 540  
 gaagtacacc ataac 555

<210> 3915  
 <211> 592  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3915

agcttttctt tctcaatcaa cctgtctatt gactaacaat tctaattgca agttcacatt 60  
 cttgttcttt ctttgacaaa catacatact tgctcaaact tatgaaaaga aacacaaaact 120  
 ccatcacaat catgcattcc atccaaaatc aattcataac accaattttc acaaaaagat 180  
 aaaaatgttt tactacataa tcatccaagt caagttaaac tattccatat gtttcaaac 240  
 aagcactact gctatccaca aacaaaaaca acagtgtata taaacattaa ccaaaataac 300  
 taagacactg aactgaaata taataattat ataaaaaaat atccaaaaag caaaatcctc 360  
 aggaatttaa aatccctgag ataggctctg tgtatcctat gtctgagcat cctcctcatc 420  
 tgtcaagtaa agtactggag tagttggagg agagggtgtc agtgtcagga ctggtgtggt 480

ctggctctct agtatgtcaa gtacaagagt ggaaggggtca nctgtaggct gtgggtgagga 540  
gaagtctgct actggagtag gaggctctga tgtgccctca agtgaatctt tt 592

<210> 3916  
<211> 827  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3916

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ggctcaacc caacaccaca aagtcagcca aaaagttgga aaaacatatg tgcaacagca 120  
acacccttga cgacacaaac ggtggcacca accatgggaa ggtgggtac aaggcccta 180  
acgcccactg gngtgcaagg gctttgcaat ccgggagaat tgccctggtg aagggttac 240  
cctggccaat gaacaaattt gtggaaaggg gcccggtgaa acccccttgg ttttgcaaaa 300  
cttaccaaaa aaaattgttc cagccccacc ccaaataagg ggaatattat ttttatttga 360  
aatatcccc caataattgg cctctagaaa acaccccccc attccacact gggggaaaga 420  
gaatctaatt atataaaaca caaaaaaggg gaggggaacc ccctttacaa agggaaaaaa 480  
aagagagggg ggaatttttg ggtttctcat aaaaaccccc ttcttctttt ttttttgaaa 540  
caaaaagtgg caacaagggt gggccttttt ttccctcgga gacaagcccc ctttttttgt 600  
tattattgac cccaccccc ccctctttcg cgcgttttgt ggtgcctctt ccctccacaa 660  
tattttttcc caaccaaagg gccaaaaaaa aaaaactaaa gacgcccga gagaaattct 720  
ctttttttt caaccacaa taaatccact tctatcaatc tgttgtttcc tctccacttt 780  
ttctccgttc gcttcttctt ttatacacat actaaataaa acaaaaa 827

<210> 3917  
<211> 629  
<212> DNA  
<213> Glycine max

<400> 3917

agcttacggt tcgagtcaat caataaaaaa caagctcatc atgggtgcaa gggattcaac 60  
attcataaac agtgaagct cttttggcta agtgactatt tcaatcaatc atggcctaca 120  
tcatttccaa aattcatgca ttcatcagat attcagagat ttatgcaaaa atcaataccc 180

aatgctagtc attctctcac aattaaggat cacaccactc accggattgt ggctaattgat 240  
 taccttcaca atttacctgt caaaccaact aacattttta gtcattgctcc taattcatgt 300  
 tctttatctt ctaattaccg cataactcatt caaagcatat gatctaataca ttgcaattca 360  
 ctcaattcat gtaattgatc aatccaattt cattcacaaa cacacaattt ccaaatacaa 420  
 caaaccactg cataaatcag actgtaaagt gttcaacaag cttcaaaaatt tgctaactaa 480  
 ataaactgaa tataaaaaatg aaattaaaag cataaaaataa tcataaaaat gtattaaaat 540  
 caggaaaagt gcataaaaat cctgtcaaag ctctctccgt gttgcagtaa gctcatcctg 600  
 gagtgaagag ggagtatctt gggttggat 629

<210> 3918  
 <211> 576  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 3918

tgaagganaa cttgatgcct tgggtccacct agtaactcag cttgccatga ataaaaaatc 60  
 tacacctgtt gcaagagtct ggggtctatg ttcttctgca gatcaccata cagatctctg 120  
 tccttctttt gcagcaatct ggagtcaatg agcaacatga agcttatgct gcaaacattt 180  
 ataatagacc tcctcagcag caaaaccaac aatagcagaa taattatgac ctttcaagca 240  
 atagatacaa tccagggttg aggaatcctc caaatttgag atggacaagt cctccacaac 300  
 aacaacagtc tgttcctcct ttccaagatg ctgctgggtcc aagcaagcca tatgttcctc 360  
 ctccaatata gcagcagtca caataaagac aacaagagac tgagggtcct cctcaacctt 420  
 acttagaaga gttaatgagg caaatgacca tccagaatat gcaaattcag caagagacaa 480  
 gagcctccat ttagagtctg acatatcata tggggcagat ggctactcag atgaaccaag 540  
 ctcaagtcca aaattctgac aaattgtctt cacaaa 576

<210> 3919  
 <211> 393  
 <212> DNA  
 <213> Glycine max  
 <400> 3919

agcttagccc aagaggggat ggaccttttc aggtcttgga gaggatcaat aataatgcct 60  
 ataggttgga cctcccaaga gagtatggag tcagcaccac ttttaatat tctgatttaa 120  
 ttccttttgc aggtggagct gatatagagg aggaggaacc aacaaatttg aggtcaaadc 180  
 ctcttcaagg gggaggggat gatgcaatcc tccctaggaa agggccagtt accagagcca 240  
 tgagccaaag gctccaaaag attgggctac agttgataaa gaaagcctta cggtttttaa 300  
 tgaactttag ggaaaatttt tgaccoccttg gcccaagggtg ggttcaactt ttttttgaaa 360  
 atatagaata agttgggttc tttttttggg ccc 393

<210> 3920  
 <211> 631  
 <212> DNA  
 <213> Glycine max

<400> 3920

ttgcttctac acttatcaat ctcccaagat tgtgacattg ttctttccac cttcttctct 60  
 aattccgcct tttccttttt attttcccca atttggtgat gctaaaaatt ggatccacaa 120  
 atcaagatac aaaggcttct ttgaatcagt ttgcaatgta tcatacatag gggcatgtgt 180  
 ttgttgaaaa gactcttgtc caagatcaca aatcatatcc tctaagcaat ctcccatttc 240  
 tacatcaaat gggtcagatt gggaccgcct ctgcatgttt gtcaatttac cattctatat 300  
 ccatgttgta taattcttct taatcttatac acacaacatg ccttcgtatg tcgtcgagta 360  
 tttgctgtct cccattcaaa taatttatac aaggacaaaa caattttttg tccccatccg 420  
 attgacttct ttgagaagca aattgcaaga actgttccac accttctca tacacagggc 480  
 tcatgggact tttattcatt caactttgat ccatctaaat aataactccg tgatactaac 540  
 aaagttattc aatgcataaa aaatctactt ttttattaaa ggtgtggggc tattccattc 600  
 aaaagacatt tttaatggta aatcatatgt c 631

<210> 3921  
 <211> 324  
 <212> DNA  
 <213> Glycine max

<400> 3921

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ttgcacaaca aactgagaac ttgtattcctt acttaaagag caacagcgct ttgtatcctc 120  
 atttttcctc gtatttatct aaaagctcag ttctcttgat gaattgtgta tcagttactg 180  
 aacctctgc taagcttggg cttatgactt ggcgaccata ctgctaaaga tgtgattggt 240  
 atttgactct aacactatat tgttatgaca tcatgggcta tacatggtgc tactgtgcat 300  
 ttagtgcttg atgctggcca tacc 324

<210> 3922  
 <211> 794  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3922

gcttgctgtg cgacgctata tgcaaccgga ttttgacggc actatgcctt cccggtgact 60  
 cgctgcgctg gacattcact ggtgaccaa ggctaaaagg tgagaagccg cgcttttccc 120  
 tctggaattc gtcattggaa gcagagctct tgcacgtcta taatgccctg ggatatacac 180  
 ttacaagaat agccttgctg gatgcatcaa ttgagagaaa gagaaaggag gcacaactta 240  
 ttagtgagga ctcagcagga gacataatgn atattggtct gtgaaaggca tcttgcacct 300  
 ttattttaacg tggaacacat gatagacatg tttgcctacg tagcctgagt cccttactga 360  
 cgtgtactct gataggagta ttccaatgac atgcacaatg catgttatca tatagccttt 420  
 agatgcctct acaactgtac gtgtgacttt tgcgcgctgt caatgattac gcccgcttga 480  
 ttattccatg catatggcgc atgcatcttt acatatttct ttccgaagtt tggagcgcgc 540  
 aagattcacc aacctctcta ataggctcct ctcagcgctc tgctcgaaaa cctgaacata 600  
 cacaaaattc tgggtgacct tgaccgagcg catggcctcg aggaagcggg tccactcct 660  
 tttaactcag taagccttac cctgaaggag aggctgctta cttgtaaagc cgtttaaacc 720  
 cacaccggtg ggaagtccgt ctccaagggg gaacacacca cccctattaa tacctcgntg 780  
 gcccccccc ctcc 794

<210> 3923  
 <211> 185  
 <212> DNA  
 <213> Glycine max

<400> 3923

tttcaactat gtgtcgctaa acatttactg atcttttctc ttacatgtaa ttaacacgac 60  
ctaagttgcc tggttaagatc tctaccttat cgactaggac taaacgccta atgacttgga 120  
tatctctaac gcaacccttt atttacetta gatttatgac taggaccctt ataggacaac 180  
cctga 185

<210> 3924  
<211> 501  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 3924

tgtccgggca gttaagcaag accgaaaata atattngggc catcatcgac cagtacatgg 60  
aaaagctaag cctagtttga atatgagcag agctagacga tgaatacacc aacgtatcaa 120  
ctcttgcgag cgggaaagga agaaatggaa taggtgatca attcattgct cacagaaaca 180  
atgatgtgga tggacaggtt cccctttact ttgaatggga gtcaataact tccccaaactg 240  
ctagccaaag ccaatgcaat ggtagatgtg tactcggtc ccgaggaagt tcacgggctc 300  
cttaattatt gccaacacat gattgatttg atggcccaca taattaagaa ccgctaattgc 360  
aattgtatgg ttgctttgaa ttgattaaa taaacccttt ttgttccta taaaatgagg 420  
ttgatttaat cctatgtgtt taaaactctg tgtgaatcca atacttcgac aacttatctt 480  
tagcatgcat tcatgttttg t 501

<210> 3925  
<211> 194  
<212> DNA  
<213> Glycine max  
<400> 3925

agcttccgtt gttgtatttc gagcgtctag atgagttagg acagcgagtc ggacatcctg 60  
tgaaaagttg tgaccattct aagctctcga gcgcttccga tgaacaatgg ccagcgtcat 120  
gatcataaat gatgctgaaa cagacatccg agagatatgt gctgaccatt ctaccctgtg 180  
cagagctttc gctg 194

<210> 3926



<211> 389  
 <212> DNA  
 <213> Glycine max

<400> 3926

tgaccaggaa ttatttgtat gggtcgaatg ttgaattccg gttgttcctg gcgcggagat 60  
 gatggtacag cgggtgaacc ataatcgga gattcttttg gtgaagtagc catggaaaag 120  
 cagagcgttt ggaatgattt cgtaaatttc agaaggctat tgggaaatgc tggataaac 180  
 acgaatgcca agcagatata aatttgaatg aggaatgtac agggtcgtgt gaagcaacgg 240  
 tcaaattttc ctgggttcat tagagaacgc gctataaatg ttaagagatc cgttgggggca 300  
 ctttcacatt gctggagggtg ctataatccc tctagcacac aaatgcccac cttgcccctc 360  
 agtttttcaa actgatgcgc ctccaaagc 389

<210> 3927  
 <211> 804  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3927

tacaaccaga agtcactcta tgctaaattt ttgaaagaa tattgcccac catagaagaa 60  
 accaagggtcc attcagaatt ggccatgtgg gtctccacaa ggaatccaag aagaagggaac 120  
 aaccttttta ctttaacccc ggtttgggtg gtatatattg cttttctcgg gtggtattgg 180  
 ccttttcggg tctgtgttaa tgctttcacc tacatttcag aggtgcatga agggcaattt 240  
 ttttctaata ttggggggaga aaatggaatt cgaaagtatt tcatgggatg atttcctttg 300  
 tttttgggtc atcttttgga tgccttgcca atcaaatttg aaaaaagtat tgtagaaaat 360  
 gtgaaaagtc taatttggtg cttaactggg aganatgtca cttcatgggt caagaaggca 420  
 tagtgctggg gcataaaatt cagtgagggg aattgatgtg ggacaaggga gaagattgat 480  
 gtttattgag aaaacttccc cctccaatga aatgtcaagg cgagtgagaa agtttttttag 540  
 gacacggtcg gttcttacag acgtttaata aagattttctt aaaagtagcc aaaccactca 600  
 gtaatatgtt gaacaaaaaa tgttgctttt gtggttaatg aaaaaagtgt ggaagcattt 660  
 aatgatctta aagccaaact agtatctgct ccgggggatt acaccacaaa attggggggc 720  
 aaaatttgaa ttgatgggtg aagccaacca atattttgga agtggtgcmc ctcggtataa 780

gaaaaggcaa aatTTTTTtat gctc

804

<210> 3928  
<211> 610  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 3928

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cctcaatttc attgtctccg tgttgaatgc attgctctct ctacagacat tatttcccaa 120  
atctcaacgg tgagaatgtg aggaaatgag ttctaaaggt ggtatccaaa tttcatgatg 180  
atccaatggt taaaagggtt gggatcatat ttttactgag atagatttga gtgtatgcgg 240  
gaaagaaaag aagggttttg gagaggaaaa aaggaaaacg aatttgagag gaaaaaagag 300  
catagagacg tatcgtaaatt attaaaattg acctaatatg tctctattta tagctggact 360  
actctcagcc tattattttac tttatttttc tttattttat tattttataa aaagaaactc 420  
tattttactc tctcattgaa taaataacca attaanatat ctttatattt tctaaaacat 480  
cattttactc tatttgcttt ctaatgctat gaaaccatta ttttaattaa aaaaaaccct 540  
tttccctcaa ttatngtaat tctaaaaact ctataaattt tagataaatc tctatttatt 600  
ttacgaaaaa 610

<210> 3929  
<211> 643  
<212> DNA  
<213> Glycine max  
  
<400> 3929

agcttgagaga ggatgcttca atggaggaaa agaaagaggg agagaaagag agagggggga 60  
gcacgaaatt gaaggaataa aagaggtaga gaagtgaac tttgaagtat gtctcacaag 120  
agtctcattc atcaatgtta ccacaagtgt tacacatgct tctatttata gactaggtag 180  
cttccttgag aagctttctt gagaaaactt ccttgagaag cttctttgag aaaacttcct 240  
ggagaagcta gagcttagct acatacacc ctctaataac taagctcacc tccttgagaa 300  
gattcctaaa gaagctagag cttagctaca cacacctctc taatagctaa gctcacctcc 360

ttgagatgag aagctagagc ttagctacac accccctata atagctaagc tcacccccat 420  
 tccaaaaata catgaaaata caaaaaaaaa agtccctact acaaagacta ctcaaaatgc 480  
 cctgaaatac aaggctaaaa ccctatacta ctagaatggc caaaattcaa tgcccaaaag 540  
 aaggaaaaac ctattcta atttacaaag aagagtggat ccaaccttga cccatgggtc 600  
 caaaaatcta ccctaagttc atgagaaccc ctaggcggtc ttt 643

<210> 3930  
 <211> 559  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3930

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 gtctataaca atagtttttg taagtataat ataattataa tgtgatgata tgaagaataa 120  
 taataatcta taaatgaatt gcaaattaca aattacaaat ctgtattaag tatcaccatt 180  
 aatagctgaa tgttgtcttt tttgttcttg caaaatagtt ttctacgct tccttcgttc 240  
 aacatatatg tccatgagta attgatttct gcaacaactg ccttataatt gccaaacaat 300  
 aggaaaaatca aatgttgaaa ttgagttaa taagttgctg tagtaggctg actttaaaat 360  
 gataccaaca ttatagttat ttgcatttgc ttcaccgagt aaagggatat gtatttgcaa 420  
 tagaaaaagc ataatagaat aaaacaatag aaaaatttgt attcagacgc attaaatntc 480  
 atactcaatg gtttagtgca gcacgaatga attgctgctc taaaatgtta ggtttgcaat 540  
 catctgtcat gtgaatatt 559

<210> 3931  
 <211> 470  
 <212> DNA  
 <213> Glycine max

<400> 3931

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 tactcctttt aagagctgga cttagggagg aggaaagaac aagcatagct aggttcctta 120  
 gtgggcttaa tatggaagtg agggacaagg ttgaactcct tccatatatg gacctagatg 180  
 agctagtcca actttgtata agagtggagc tacaacttaa aagaaagtct tctttaaaat 240

cttaaggctt tcaactttat ccaaggaagg accaagccca aggaattttg gaggctgcac 300  
 cttgaaaacc caaggaagat aagggttaaga ccatagagaa atccaccctt aagactagtt 360  
 cccaagaaag gactagcaac ataaaatggt tcaaattgtt tggcagaggt cacattgcct 420  
 cttaatgccc cacaaagaaa accttgatta tgaggggtga agacatttat 470

<210> 3932  
 <211> 423  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3932

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 cattaagatt ccttgggtga ggtgggacat agtctgecta cctaagagta aaggtgggtt 120  
 agggatcaaa gatttgatta aattcaacga ggctttgctt gctaaatggg ggtgggagtt 180  
 ggcaaataat cagaatcagt tgtgggccac aattctattg tgtaaataat gtggttgag 240  
 ggatttgatt tctcatagga actgcagttt agactctctt tgggtgaaag acctcaaggt 300  
 tatcttcaag cagcagcaaa gcaacacaat ttgtaaaaat agctttattt aggccatang 360  
 taaggacggt ccatggaata caaccaagt acttattggc ttgacaacaa aaaaaacact 420  
 cat 423

<210> 3933  
 <211> 113  
 <212> DNA  
 <213> Glycine max

<400> 3933

ccaaatcctt cagtaggggc tcctaaaacc tcctttagtt ttttttgggt ttccctctctc 60  
 ttcaatggtg gttcctcatt tttttccccc tgggccctcc tcaattgcct ggg 113

<210> 3934  
 <211> 584  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3934



<223> unsure at all n locations  
 <400> 3936

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 gacatattaa gtcaaatgac tcctattctc gataactcac ttttctctca aaaggaacaa 120  
 actttcagaa atgataaaat gaggccacat gaatgtctgt atatattttt tatttgaaac 180  
 atagtcaatc aaatgctttt tctttttttg tttcgaactt tactcgtcac tttacgacac 240  
 cttgaccaa catgcataac gagtaatttc tgattgaaca gtcttggaag tcaaacctca 300  
 ngagcgcagg tcgcttgagc aaacaaacca acaacttaca ttcacattcc agtggaagtc 360  
 aaataagcaa agatgtaatt atgagaggat gagagaaagg gatgtcaaat ttatccatat 420  
 tattagcatt gtaattgtgg tttaacaataa tggcataaac ttaaaaaatc taacaagtca 480  
 ttagagacat ctaacaacaa ccttcaaatt gccccatgta tagtgct 527

<210> 3937  
 <211> 831  
 <212> DNA  
 <213> Glycine max

<400> 3937  
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 tgagtgtgag gtataaaaga tgacatggaa ccaaagata ggctgttttg tttagtgagg 180  
 gagtattctg atgcgttgag gagggttgag acttatacac agattccaat agagagcttg 240  
 tgatgttcaa cctatgggcc tgtcctaagc tttttagttg attcggacat ggtataagtt 300  
 gtgatggatg caggttagct ttttaaagc tttacaaagg tgttcacata gcatcccatc 360  
 ttagcatatg agtattgttt ttaatgagc atggttagct aatatctgtt cctattgcta 420  
 tgaagcacta tttttgttt ttttctata tagcgataaa aattattttc tttttcaaat 480  
 gtttttttaa ttattaatgc ttcttgattt agggaaacctt gtaatttatg ggaaaacctg 540  
 ttcgccgtga aagtctaact tcacagatta tcctactaga atgaatgacc gctttttaaa 600  
 ctcattttct tgtgttatat ttaatgttgt ccacctcaac catatttcta atttggtgat 660  
 tgtttatcta tctgtcata catatttcta tgtatcttgc gttcttattt tcataacgct 720

ctcgctattc ttttttggg atcctactca ctctatcttc gactatatgc cttttgataa 780  
aatgtttcct ttattatact cacctatttc tataccctta tcaccgtact t 831

<210>	3938
<211>	294
<212>	DNA
<213>	Glycine max

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aaaaccctag	gcttgaatga	ctacgcttga	gggatccatc	tggcacttta	tccaagcgac	120
tacaagctac	ccacacactc	acaatgcgca	caatttaatt	ctccagcgga	gttccacaaa	180
atcatgcgca	aatgccatag	aggcatctca	ccgaacactt	ggtgggggca	tgtttaatcc	240
ggatcatcaa	gccgaagggtg	gcaaccagac	ttgccacatg	ctcataaatc	tccc	294

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acatttgcta ttgatttgct ttaacctagc cagtgggtcaa acatgtttgc ttatgttaag 60
cggcttatcc ttgcgtgttg acttcgtgct aatgggttaa tgtagcttcc ctacacatac 120
atccgaattt ttttctaaac atattt 146
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gggtaagtta atcttttcat ttttctaagt attattatat atttggatat tacaatctta 360  
 ctgacttta catggggaag tcttcctttt ctgttggtta gttccaacaa catacgtgtt 420  
 ccttccatac tgcaattttt atgacttccc tatcattaca taaatattga ttgcgcaaga 480  
 aatatttgct gccctatttt ccttttccat ttatttgtac attgaaataa aata 534

<210> 3941  
 <211> 220  
 <212> DNA  
 <213> Glycine max

<400> 3941

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 aacgatgctt gcctttatac cttgaatatg tgtgaaatat tactcatatt catgggtgca 120  
 tacatttggtg ctgacacatc aagtatacgg ttgtattata atgaatatat taagcttgag 180  
 atatcattat tttttatatt gatcaacca atgagatgca 220

<210> 3942  
 <211> 506  
 <212> DNA  
 <213> Glycine max

<400> 3942

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 tatgtgacc catcctaaat aatttgctgt ggtaagtgga tgctactctt atgaacttgt 120  
 gttccccctt taatataagg aaaatgcact tttcatgac attacatgtg ctgatttttc 180  
 aggttgatct tgatccttat ggctcacctt cagggtttct ggatacatca gatcactcta 240  
 ctgctgatgg aggtatgctg atgtgtactg caacaaacat ggctgtgctc tgtgggggaa 300  
 atggggagggt ctgctattca aagtaatgtg catactctta ttcacaatca actttcattt 360  
 tgtttgattg gtggactgaa cttttaacaa ctgctattca tactacatat ggatcatacc 420  
 cattgagagg gaaatcttgc cttcaaagt gctttgagga acaagccggc ctgcattgac 480  
 gtatggtata taacgcagaa actctt 506

<210> 3943  
 <211> 572  
 <212> DNA



<213> Glycine max

<223> unsure at all n locations

<400> 3943

agcttgtaat cgattacaca aatcttgtaa tcgattacca gaggagaatt tcagaaaata 60  
atttccaaga gtcacatctg ttcaaatgat tttttaatgg ccatcaaag tctatttata 120  
tgtgacttgg aacacgaatt tgcttagagt tttttagaac aaaaaggctt taccctctca 180  
aaagaaaaat catcttatcc acttaaaaaat tccttggcca atacacttgc aattcaataa 240  
ggaattattt tagtgctcaa ttgttcaatc tatctctttc aagagagatt tctttttctc 300  
ttcatcttat ttctgaaaag ggattaagag accgagggtc tcttggtgta tagcaatcta 360  
aacacaaaag agggtttgtc cttgtgtggt ttaaaacttg taaagggtt ttgcaagata 420  
gtggaactct caagcgggtt gcttggggac tggacctang cacaagggtg tggccaaact 480  
tgtataaatc tgaatttgca atttttttcc cttgaaccct tttattgggt aatgcttatt 540  
gcttctattc agaaagttaa aattcgcata at 572

<210> 3944

<211> 512

<212> DNA

<213> Glycine max

<400> 3944

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cgtcttgtaa taacaaagtc attgacattt ggcatttcca tttgggtcat ctttcatatg 120  
ataggatgca attgttctaa caaacttatc ctatgttgac ttgtgataaa acctttgttt 180  
gcgatacttg ccttagagcg taacagagaa aactttcatt tcccaatagt gactcataag 240  
cttctagtcc tttcaatttt atacatgtag atatttgggg tccttgtgcc acaactgctt 300  
tgaatggaca taagtatttt cttacaatta tggatgatca tactaaaatg gattggattt 360  
ttataatgac ttcaaaagtt gagactcaaa ctcatcttaca agcctttggt gcctatgttg 420  
agaggcaatt taatacaaaa atgaaagcta ttcgatcaga taatgggtgct aagtttatca 480  
tgaacacgtt ttatcataat actggtatca ta 512

<210> 3945

<211> 521

[illegible]

<400>      3945

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ctcttctttt attgctctat actaactctg taatcttaat gcaattcggt taggctaagt	180
tcgacgagga atcctagaat gaagttaaata tataattagt ccattcaagc gaggaatcgg	240
tgtttgggggt atttgctctc agcatagaac acagaaacaa ctttaaataag agaaaaacac	300
ataattacat caagttgttc agtagaacga cccaacgttt taatcatttg tttatctctc	360
actattagat agcaattttg tagttatttt tagaattaaa aaaattatct tttgttatat	420
tttctgggtc catacaaagt gctgcttatt gaacgaacac ttttcttaat gaaacaaact	480
ccctgtgatt cgatactcga ttcttatcat tttatattac t	521

<210> 3946

<211> 595

<212> DNA

<213> Glycine max

<223>        unsure at all n locations

<400> 3946

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aaaaaaaaac	aataatgata	aaaatatatc	gt	ttaatgta	ttcgatgcag	cttgcttctg	180
tacttcgtgg	tgatctgtat	ttgtccaga	gatgatccat	tatatcataa	tctatatttg		240
tttttaagat	acttg	ttttt	gatatcagtg	taattatcac	attaagctta		300
gtacctaaaa	tagtcctaca	agttttaatt	tttttagacct	attataaaaat	taatctttaa		360
tcaaaactta	atgacattta	aagtttatta	ctccttctca	ataatatatt	ctgtaaagaa		420
ttaaattcag	at	ttttttttt	actatatgca	ttatcaatta	aattacattc	attaaataac	480
acggatatttg	ttttaatgcg	gcccanatag	aataagtgat	cgagtg	ggaaa	tagaaaaaca	540
aaagcattga	tttttagtca	cttttactga	gaaaacg	ttt	tgaaacagtt	gtcat	595

<210> 3947

<211> 536  
 <212> DNA  
 <213> Glycine max

<400> 3947

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 ctatgagtga gaggaagaaa agattgtaat ggacagaaag aaaaacatat ttttcgatgg 120  
 aggtggtagc tcgtcacgctc aagggtgtgtt gagagggaga gagagataca gagagtgagc 180  
 attgtgaggt acaatgtttt gtacagagtg aggaatttta attcctttgt ttttgctaag 240  
 aatttgaaat tctgtcaagt tagtatatta aaatgcttta caaaaatgat aacatagcat 300  
 ccaaacatag cataagagta ttgcttctaa tgtgaagttg tcaactaaga tctctccata 360  
 agctaagaag gcaatattac ttgtaagcta cacatatagt gatagagata aatcactttc 420  
 aagtagattt ttttaattcta atgctattga ataggggacg atgaaaaaag ggaaaattgt 480  
 tgcaggaaaa aatttaattt caagaaaatt ccacaagata gatgacggat ttgaaa 536

<210> 3948  
 <211> 560  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3948

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 caaaaccaga aacttgatt cctaggcatg agtcatectt ttggcacttt agtctagctt 120  
 ctacaaacta cccacacact cacaatgcgc acaatttatt tcgcaagcta agttccacaa 180  
 aatcatgcgc aaatgccatt gaggcatttc accgaacact tgggtgggcgc atgtttaagc 240  
 atgaaaatca agggaatggg ggcaatgtgg catgccccat tatctcagaa cgcaccctag 300  
 gcctaaggcc atcccctaca acccctcaat tcaacaaaaa caagcaataa ttcaaggata 360  
 aatccctcac gttttgagca aatacatgca acttagagca ccaaaatata tcaatggaaa 420  
 gccaaagagc ccaagaatga ggtacttact ttntggagat gaataataga gcaaaatgga 480  
 atcaaaaacg tgaaaaatga tgacctatgg gctgcaaaat tgggtgattcc cgtagccttc 540  
 tttttgaatg aagggggggg 560

<210> 3949  
 <211> 603  
 <212> DNA  
 <213> Glycine max

<400> 3949

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 ttaatattac gagtaaataa catatacaaa gatgattaat ttttacataa tcaatcacat 120  
 attatcatat aatgtaaatt gattgatagt aataataaaa atataaaatt catattaatt 180  
 atgatttaag ttctaaacat tatagatgat atgataaaaa aaatgtgtat aaaaatgaga 240  
 aattaagcaa taatgagaga aaataaaatt gaataatgaa agagagaaaag agtgtgaccg 300  
 tcacagcttc caatagattg gtgttgctgt gcaagtactt gaggacccat gttagaacac 360  
 ttgctgtggg gtcattgtgca gcaaagatga caccaatgag attatcaaca acttgagaat 420  
 ctgtgtgctg ctgatagtac atcttgttct tctcacctcg agcttgcaat agaactccca 480  
 atagcccccc accataattt aacagattat agactcttat aattacattt caacagaaaa 540  
 acccaagtca gtgtgaccat caacaaatgt tacatattat atataaccag tgctggataa 600  
 aaa 603

<210> 3950  
 <211> 624  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3950

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 aattaacttg tattgaagca actaattaaa ctcccttacca ataatagaaga gagcagcttt 180  
 ccaagaacca gttgaagctc tgagtggaaac cctgcctttg tgggtccactg aagaatcaag 240  
 aacccatttc acctcatcac cctcttctgg ttccacttca agactaacct tcttctccat 300  
 cttgcagtgt tgcttcagta ttgctacttt aattctactg caagtagaga agactaaccc 360  
 ttctagcctt gcttcttgct agtgtctatc tatttacacg caccaacctt taacctcang 420  
 acctctcttt atagaggagg atttgctntc tttctttatt tctttttttg aaaacttatt 480

ccttttttct tttctgttgg tgacataata aagatatctt ttaagtttta attatatcat 540  
 tcttgatttt cttttcacca taatttctta gactcatata tttataaatc actttctctt 600  
 ttttttcctt ctaaattttc tctt 624

<210> 3951  
 <211> 493  
 <212> DNA  
 <213> Glycine max

<400> 3951  
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 aaattagagt ttctctcttt tatcttagtg agagtgatc tcctaaattc ttgagtgatt 120  
 caagaacacc ctggctgtat caaaggactt tcacaacctt tgtgtgttgc cctcgctgga 180  
 aagagtgatt ctttcctgat acgaaatcag agtgcggtaa cggaagcaaa caaccaataa 240  
 cgaaggtact aggtaccacc cttattagtc gaattctttt aagtattttt ggtatttgtg 300  
 tgtttgggtt tttacgaaaa tcagcaagga aaaataagca atattaaact acaccaatag 360  
 cttaatacga gattagcact caccaccaat tgagctaate ggactatttt caagacgacg 420  
 cttgcaaata atcgggcgaa aatgtaaacc caatttctat ttggactgaa ttgttcttgt 480  
 ttattgaata atc 493

<210> 3952  
 <211> 606  
 <212> DNA  
 <213> Glycine max

<400> 3952  
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 ttctattttc agattgggaa tgccctaac agcacttttg tcaaggattt tttcatgcc 120  
 tottaagtgc agatgtccca acctttgatg ccatattctg acttcatctt ctttggagga 180  
 taaacatgtg gaggagtacc tggtttcttg ggggtgtccat aggtaacaat tgtcctttga 240  
 tctgtgccc tctattagaa cttcactctt ctcatctgtc accaagcatt ctgactttgt 300  
 gaaagttaca ttgaatcctt catcaaacag ctgactgatg ctgatcaagt ttgcagtcag 360  
 tcccttcacc agcaatactt tgttcagact aggaagtcca tcatgaacta cttttcccat 420

tccaatgaac tttccttttag agccatctcc aaatgtcaca taactagtgg agccccggctc 480  
aatgttcacc aggaattctt tgactcctgt atgtggtggg aacaaccgct atctaagtac 540  
ccatcttcct taactgatgc tctaattggag gatgaacaac aagaatgaag tcttgtgttt 600  
aggaac 606

<210> 3953  
<211> 566  
<212> DNA  
<213> Glycine max

<400> 3953

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acgcatcaac aagaatcaag ccgaggctat tgtgcaagca atcaatgggg caaaacacac 120  
caaatgatta taatgatgga tggtcaaatt tctcaciaag gtaaaatcat cactttcaaa 180  
ttgagctttc aaaactatca tgacatgtag agaagaatta acgattttcaa gtcacaaaat 240  
gtcaagaact tttattttca aaacaattac ccatttcttg aacatatcct ataattcaaa 300  
gaaaaacatg caaagtcgta cgtgcacaca aaattgacct aaaatattaa actgaaaatc 360  
cgacgaaact aacaacatta acaaattaac acaactaaca aattaacaaa gccaaacaaa 420  
ctatcaaaac cacagaacac tcccccccat acttaacaac acattgtcct taatgttgcc 480  
caattaaaag attaaaacaa tttaatcatc aaagagaatc cgaccagtgt aataaagcca 540  
agagggaaaa ggaaaataaa acttcc 566

<210> 3954  
<211> 605  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3954

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taaagtaata gcttccacta gtgctttttc tttcaacttt atcaccaaca tagtcaacat 180  
cataatagct tgtaagtctg aaactttctc ttcttttgaa cataagacca agattagaag 240  
ttccaattaa atatctacaa atatgtttta ttttagttag gtgaacttcc ctttgttctt 300

tttgaaatct tgcacataga taaacattga acataatatc agaaatggat gcagtgagat 360  
agaccagtga gttgcatcca ctttttttga tccttgcca atccaaggta tgtcatgggtg 420  
tgcattggag tcttcatttc ttttcacgc ccatgttgaa tttcttcagc aattctttca 480  
catacttagt ttgatgaatg tagatgcatt tggctttttg gtttatttgt aatccaagaa 540  
agaatntcat ctctcccatc atgctcattt caattttgtc tgcataagca tagaaaaatc 600  
ttcat 605

<210> 3955  
<211> 529  
<212> DNA  
<213> Glycine max

<400> 3955

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attcctaatt ttcaacttac ctatttggat gtgacatcat ggcagatagg tccaacttt 120  
ccgtcgtgga ttcagtcaca aaacaaactt caatatgttg gactgtctaa cacggggatt 180  
ttagatttta tccccacttg gttctgggaa gcacattctc aggttttgta tttaaacctc 240  
tctcataatc atatccgtgg tgagcttggt actacaataa aaaatccaat atctatccaa 300  
actgttgatc taagcacaaa tcatttatgt ggtaaattac cctatctttc aaatgctgtg 360  
tatagggttag acctttcaac caattcattc tctggatcca tgcaagattt tttatgtaac 420  
aatcaggaca aaccaatgca attagaaatt ctcaatcttg catcaaataa tctatcacga 480  
gaaataacctg attgttggat gaattggcca tttctagtgg aagtgaatt 529

<210> 3956  
<211> 439  
<212> DNA  
<213> Glycine max

<400> 3956

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gcaaaaagtg aagtgtggaa gtgaagctga agaagatggg aagtgcggtt gtggcagagg 120  
actccatacc agtggcaaca gttgggtatga ttatgattcc aagaccaaag cctattggaa 180  
ggatctatga gattattctt aaacttcaaa agtgtctcac gctcacttgg gatgcacaca 240

ctctctctgc atggtaagct caacaaccaa aggtggagaa agacaagaat ataaatggag 300  
gaattcatga tcacacaaga atatatagaa aacaagtgtg gttgttggtt ctgcatataa 360  
atcatcaaac ttctattatt tatactgctg cctgcctgt ttttttttct tcactttcat 420  
tattttttac cttttttat 439

<210> 3957  
<211> 509  
<212> DNA  
<213> Glycine max

<400> 3957

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attaattttt tgctttacct tctcttccat tgatttttct tcatttttct ccatgtatct 120  
cctcacatgt cttgttctaa atgttggtta catgattctt tagagtgtgc accgattaaa 180  
cttgctatag aagttagatt tgatttttcta tgggtcaaat ttcttggtct tgatcttgaa 240  
ccatgaattg tgttgagttt aggttccttt gagttttgtc ttgttatttt ttgtggctga 300  
aacctaaacc ataaaattct tacaaaaata ttaaagtaga agaaaacctc aaaaatctac 360  
agtgacttgt tcacctattg tagttttgtc atagaagtca tgtctagtca tgaaacttgt 420  
cacataagat ttcttatgtt gcgctgaatt atattttcct gactctttga ctaactcaat 480  
tggtcatgag tgtatgaaat tcttttagc 509

<210> 3958  
<211> 474  
<212> DNA  
<213> Glycine max

<400> 3958

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taagggtagc atttcttggt aaaactaact ttccaaatgt ttgccttcat aggaatggcc 120  
ccgacgaagc ttgcctcaaa gaggtccagg aaggacaagg cggccaaagg gactagctcc 180  
gctcctgagt atgagagtca ccgcttttag agcgtgtac accagctgcg cttcaagcca 240  
tcaagggatg gtcgttttct cgggagcgac gcgtccagct caaggacgac gagtatactg 300  
atttccagga ggaaataagg cgccggcggt ggacatcact gggtactccc atggccaagt 360



tcgatccaca aatagtcctt gaattttatg ccaatgcttg gccaacagag gagggcgtgc 420  
gtgacatgag atcctgcgta aggcgtcagt ggatcccgtt tgatgccgac gcta 474

<210> 3959  
<211> 548  
<212> DNA  
<213> Glycine max

<400> 3959

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cacatcagga aggtataaat tatactgaga cctttgcttt tgttgctcgt ttagaggcaa 180  
tacggattct actatccttt gtttccatt atggatgat gttgtatcaa atggacgtat 240  
aaagcgcatt cctcaatgct attattaagg aagaattcta tgtggaacaa cccctgggt 300  
tttagagtcc tatttaccct catcatgttt tcaaacttaa taaagctttg tatggtttaa 360  
agcaagctca ttgagcttgg tatgaaaagt taagttcctt cttactgaa aatggtttta 420  
taaaacggaa cgtaaacact atttttttt gcaaagatta tataaatcca ttcctaattg 480  
tccagatata tgacgatgat atattattta ctgcttctaa tgactttttg tgtgaggact 540  
ctttcaaa 548

<210> 3960  
<211> 653  
<212> DNA  
<213> Glycine max

<400> 3960

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agtccctctt ctctttctct tttattttcc gttttttaca attccagttc agacttttag 180  
ttttatcaat aaaatttcat tctctatttg attaatggaa ggctaagtcc gcaacgttgt 240  
tttcccttga ggatcaagca cagttctttt tgaggttcta ttattactgt taaattctgt 300  
ttagttgttc ctcttcaacta attactttga atttggtgct ttttaattcat gcatgcttaa 360  
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ataggcgtat gtgatgctca atcacataat gaatgcccta tgttgaattt cgcttaataa 480  
 ttttaatttac ggttggatta aatgggttaa ctgataaaag ataaactctc gtaacctagg 540  
 ataagagact tgcttgtgaa tcaggggaag caacgggggtt aatcttgata tttctaaatc 600  
 acatatattt gtgttaactt acaaagcaaa caaccccccc ccatcgtact gtt 653

<210> 3961  
 <211> 544  
 <212> DNA  
 <213> Glycine max

<400> 3961

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 taaatacacc cccttgccct tttttggaga ttcttttttt gtaaagatac gaaaacttac 180  
 ggatttcgca atgatactag ttttctttcc gtaatggtct acggaacctt gcgaattaca 240  
 taatcatccc cttttttgac ttatggaatg ttacggaacc ttactaattg tgcaacgatg 300  
 cttcattttg atttctggtg tttcacggaa ctttacggat tgtgcatcaa taccttcttt 360  
 tgatttcggg catgtcctgg aacttcacaa attgccta at gatgggtgcc aagcacctca 420  
 caaggatcaa acaaaagttg cttgccccca agcaaaggct cccggacgaa attatggtat 480  
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 tcat 544

<210> 3962  
 <211> 546  
 <212> DNA  
 <213> Glycine max

<400> 3962

tccatcatgt ggtcatcaga gcacaagagc ttcaagtacg tgtttcttaa acctccatta 60  
 aattgtttgc tataccttct cttccattgt tgtttcttca tttttctaca tgtatctgct 120  
 cacatgtctt gtgctaaatg gtgctaacat gattctttag attttccacc gattaaactt 180  
 gctatagaag ctagatttga ttttctatgg ttcaaactct ttgatcttgt tcttgaacca 240  
 tgaattatgt tgagtatacg ttcctttgag atttgtcttg ttattttttt tggctgaaac 300

ctaaaccata aaattcttac aacaatatta aattacaaga aaacctcaaa aatctagagt 360  
gacttggtca cctattgtag atttgtcata taagtcattg ctagtcattga aacttggtcac 420  
ataagatttc ttatgtcttg ctgaatttta ttttcttgct tctttggcta actcatttgt 480  
tcatgagtgt atgacattat tctcacctat tatttgattt gagtcaaate ttgcatgtta 540  
attaac 546

<210> 3963  
<211> 580  
<212> DNA  
<213> Glycine max

<400> 3963

agcttggtctc agcggttatg cgagacagag accaactgct tttctatcat cgccaagtac 60  
caagaagagt taggtctagc cggggcccac aagcataaga ttgaggacga atatgcccac 120  
gtatacgagg aaaaagaggc tagaggaagg gtgatcgact ctttacacca agaggcaacc 180  
atgtggatgg accggtttgc tcttaccttg aacgggagtc aagaacttcc cgcgttatta 240  
gccaaggcca aggcgatggc agacacctac tccacccccg aagagattca tgggcttctc 300  
ggctattgtc agcatatgat agacttgatg gccacataa ttagaaatcg ttaggaaact 360  
tgtatggtct ctcagacctt gactagatat gacttctttt tttgaaataa aatgagtagg 420  
tcccatgttt ctactccaaa aagcttgtgc aaataaaatc actcctacat ttaatctcta 480  
gcatgcctta tctatctttt acccactcct aacggttggg tttttaggga aaaacaccca 540  
tactaaaccc gccgcagggg aaccctatc gcaccagatc 580

<210> 3964  
<211> 705  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 3964

cctctattta ccgaccttaa atctcagctt ttacctaata ttttgtcaaa tgaaatttaa 60  
ttaaccataa tgaattcccc tattctaaaa ggaagaactg aaatccccctc cgtaaaggaa 120  
gaactgaaat cccctctaaa tctgaaaggt tggaataatg gaacccaaca acccacaatt 180

gttcatttta aaaagatgga aaccatgatg tatgactatt agaaatttta gtttactcat 240  
 ttctttcagg aactttggaa aggtgtacta attagtttga aggtttaaaa tcacaacctc 300  
 agcttgagtt ggttgcattg angaccaaca tgttgtggaa atttcatctg caaaagaaac 360  
 taatatggtg tcaataactca atagtaggaa gagcaacaaa tgatagatca tangaacttt 420  
 gtttttagtt attaccatct tcaactttgta agtaaattgt ctatacttta gagaaagata 480  
 tgactaaaca gttgatatag acaatgttcc agcaaggatt ttgtgggggtt tggttcaaca 540  
 ttccctcaaa aaatatttga caatatttgg accatcatgc cttgctgttt ttctctaagc 600  
 ccttcattca ggttattttg ggctgtgtca atcctaagtc tttttcttca ttcaacttgt 660  
 ccttgggtgc ttcaataatt gggaaatctc ttacattgct ctacag 705

<210> 3965  
 <211> 697  
 <212> DNA  
 <213> Glycine max

<400> 3965  
 agcttatgcg cctatttcct taaaaacggt ctcttgacac agacatttaa ccgaaaaatg 60  
 caccatata caatcaaggc agcttcgtta cctagattat ttacacgtac ctccaagggtg 120  
 tatttggtac ttacatcaca cacatctcct tggctaaact cacatacatg cataactcaag 180  
 cattttgggg caccaaaaat tgcacatgtg cacatcttgg catttctaatt acctacatac 240  
 gcaaacttca tgatgaatct tgactatcta cacaataagg tgctacattt catgctcttt 300  
 tttttttcaa gttttcgcta cctaaagccg catgcaaatt caagcatatt ttcttttgct 360  
 gactaaaatt gcattcaaatt taaaaggta tattttttgt aatatgtttt cttcacataa 420  
 catgcaacat atttatatat atttttttgg gagacatttt tgactaccaa aaattatata 480  
 tacatacatt caagtatttt gctattcata cccaaagtgc caattgccaa aggtatcttg 540  
 ctacctattc taaacctaca cattcatgac gagcacattt tctaaacaac taggcgtagg 600  
 gaaaaaata tattgggggc catacctgat tgctgccccaa aaagggttac cttacaaaaa 660  
 tgccctcct tttgtatctt ttgcataaa atttaatt 697

<210> 3966  
 <211> 502  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3966

ttataagtgc gggctctggga gacgaaagtc aagtggtcgc gatatgtgaa gatgatgttc 60  
caagtacctt ggatttggtc cgaccatgcc ctctgattt ccagctggga aaatggcgagg 120  
tggaagaacg ccccggcatt tacgcaaca gcataatgta aacctttacg gttttaaaag 180  
ctctataatt gggcctaggg tttagagttt tcattttgtt aaggctttgt gtcttttgtc 240  
tttgaattta taatacaagg atctttcttc atttgttcct ggtctctacc cattctcatt 300  
catttgcatt tttacttctt tttctgaaac ggcagattcg atgacgagtc ccccgaaagg 360  
actaatacct gngacccgtc tatcaacttc gagcaagaaa tgaaccaaac ggaagatgaa 420  
ggagatgagg aggtgggact tccttcagaa ctagaaagaa tgggtgcca tgaggaccaa 480  
gaaatggggc ctcatcaaga ag 502

<210> 3967

<211> 600

<212> DNA

<213> Glycine max

<400> 3967

catgctagct taggttatat gaggagcgac attctttttt tccccttctt actatgaaaa 60  
acggatcatt tttcatgccc atacggctca taagtgatca caattcaagt aaacagaacc 120  
ccttgattct ctcttatgac ttaactacgt aggtctgatt tcctctcgca cagtgttagga 180  
ctacgtacgt atactgaagc cccgcttttg tcgactcatc aatagtaaga ataaatccaa 240  
ggaactgtcc tacatttggg acaaactctaa attagtagc tgctgtcctt tgaatacaat 300  
acgtgatagg cgctaattcc ttactcagtc gtaagtgcaa ctccagacct gataattttc 360  
attatgagcg gcttccttca gggtatccgg cggagtgcac aaataaaaacg ttgtaggcga 420  
ctccatgcat catttcttgc tttgaaaagc acgcccgtga gcctcgccctc gctcgcccg 480  
aaaagggtc gcttgcgaca ctaggaatct aaattggcct tggcatttta cgggcccattg 540  
gcaatattcc tataagacac ccctaaattt taatattcct caccaacagt atgtcttgcc 600

<210> 3968

<211> 388

<212> DNA  
<213> Glycine max

<400> 3968

tcagagtatg ctccacttgg cctgggtgaa catattgttg gtatgcccta acgagtttaa 60  
agtgaaaatg aattatttta tatatatgcc aaattttctc atgaccttat tttatataaa 120  
agctgtgtat gtgcttgtag cctccggttg tattccaaca tatcatattg cattttcatt 180  
tttaagcttc ttctgtctat cgtatcgtat ttaaagttga gagattgtgt attctcttga 240  
tgaagtatgg acacaaacca ttaaagtcac tggccgaccg accatttact ctggttgtaa 300  
tcaacttcgt gccacaacct ataggagttc aatctcattc aaaccaataa catgtcatca 360  
taataacctc ctacgggagc catttata 388

<210> 3969  
<211> 589  
<212> DNA  
<213> Glycine max

<400> 3969

agcttgaaga caagactata cgaggtatct tccttgggta tagcaatatc tctaagggct 60  
accgtgtcta caacttgcaa actaagaaac tcgtcatcag tcgagatggt gaagttgatg 120  
aatatgcttc atggaattgg gatgaaaaaa aagtggagaa gaacgttctt atacccgctt 180  
aactacctca agaagaatat gaggaagaag atctagggtga accaccttca cctacatcac 240  
aacaacaaga tcaagaacta tcataccag agtctactcc aaaacgagta agatcttttg 300  
tggacatata tgaaacttgt aacttggcca tacttgaacc tggaagcttt gaagaagcgt 360  
caaagcacga agtatgggtc aaggcaatgg aagaagagat acagatgatc gagaaaagca 420  
acacatggga gttagtaa at cgtcccatg gaaaagatat cattgggggt aagtgggtct 480  
ataagacaaa agctaaacct tgatggcacc atacagaaac accaagcgag gctttagact 540  
aaaggtttct catagcaacc cggaattgac tacaatgaga catttgccc 589

<210> 3970  
<211> 705  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 3970

tctatataag ctgaaccatt ttatcaatac acacaagttg agttttattc acaaaattag 60  
agtttatctc ttttatctta gtgagagtga ttctcctaaa ttcttgagtg attcaagaac 120  
accttggtcg tatcaaagga ctttcacaac ctttgtgtgt agccctcgct ggaaagagtg 180  
attctttcct tcttttcac atcacccttg ttctttcaaa ccacaattcc agaaaatcca 240  
cctctgcccc gaattatctc gtggccataa ctccatttt acgcactcaa attaagtgat 300  
tcttgagcct aaattgaatt tcaaaacgag acctttcacc tcgttttgga atcacctcat 360  
ttggagccct gtagcttcag ttattgccat ttctatattt ctgtccagcc accacttaac 420  
ctacgtttta ccatcccat catccatttt atgccaagaa ccaccttatt aagaccacg 480  
anattagcca ccttattttc cattctttcc ttaatcaatn tccgcatttt ccatcaaggt 540  
ttaatcctag acgatcctaa gtcagccctt gtgccatgtg ggttcatatc atttggtatc 600  
agagctccgg tctaggatca acattccttt gctgggatat tggtaacatc cttcttattc 660  
tctttgcatt tatataccct cttatcatat atatttttta ggctg 705

<210> 3971

<211> 468

<212> DNA

<213> Glycine max

<400> 3971

agcttctctc ttttcttggt taattattat attttgtttt taagtcttgt attttgctat 60  
gtttttatgg catttgaaca cttagtattt ctttttaata tttgttgagt atgactgaac 120  
atgataatta tatttacttg cttttgggtt tttatgggta tgaattttaa acttaattat 180  
tttgataata tatgatcagt ggtatgtttg atcaaataatt aattatgtta tttgataatg 240  
tgggtttttt tatatatttg atctatttat ggttcttgct atgatttggt ttatattttt 300  
ccatgaatga ttgtatggat gcttaagtta tatttgtatg tttttaattt gttacgcact 360  
ttggcatttt gttgatgccc aagggggaga aaaatatgga ttaaatcaac aactcacacg 420  
agtaatcaac ttacttttta gagaagcatt aattcaaaaa caaagggg 468

<210> 3972

<211> 525

<212> DNA

<213> Glycine max

<400> 3972

tggtgcatat gatttatatg atctcactta cagggggctt gttataaact tgaattgtca 60  
tgaaccaact cttgtcaaag aattaactgt taggctgtta agtgaagaca cacatggctt 120  
tatgttatat atctaacaat aatgaatcta ttaatatagc ttacaagttc attatgcata 180  
caatttttagg tccaagtcac tgcatatatt ttcacgaacg aaatcaggac ctgcatattc 240  
attattagat tcatatataa atttttgtcc gtacttccat agtgtccatt gacacatttt 300  
tagcatatga ttctcttttc tatctttttc tccacaacaa tgagcccaag gagcagagtt 360  
ttcttatgag catcaatcaa gaacgttcaa ttatttatat tacatgatag acaaactaaa 420  
tttagtttat taatattgaa cacttttttg gataatagaa ataattttaa tactttaacc 480  
aggtcatttt tatttgtctt agaataggca ttatgtgcac tttct 525

<210> 3973

<211> 473

<212> DNA

<213> Glycine max

<400> 3973

agctttcaat tcattctata cacccttagg gggttcattct cgctttgtac attttcatct 60  
tcattctgct tacttttggc attctttttc ttcattttta atgagtttcg accgatcggt 120  
taagccgtaa cttcacttaa tcaatgtgaa aatgaatttc aaccaattgt ttgcgtcgta 180  
atctcatata ataacattta aaataaaaatt caaccgatcg tatatgttgc aacctcggtt 240  
aatcatcaaa agggaaagtc ttaaccaaatt atttactttg aaagttctct ctaattgagt 300  
taagaaataa ccaattgaga ctaacgctta catcaactca catatcaagc ttttgcccgt 360  
aaaaaggcca ttgaaactg ttggaatgct caacgccttg acggcccccc atttactttg 420  
atccatttaa gtatacattt ttaagggaaa cattttcgac ccccataaat ttt 473

<210> 3974

<211> 317

<212> DNA

<213> Glycine max

<400> 3974



gtgtgtaatc aattacactt attaggtaat cgattaccag tgactgtttc tgaataaatc 60  
 aaaagatgta actcttcaaa ttggtttttt tctaaaagtt ataactcttc aaaatgggtct 120  
 tcatgaccag acatgaagag tctataaaag caaggctttg ctttgcattt tcaatcaatt 180  
 cattctttca cttttcactt ttccaatcaa tcctttacaa gccttgaatc tctttgaact 240  
 tcttcttctt ctttgtacca aaagatttct gaagttttct ggctttccaa accttgaaaa 300  
 cttgtgctat tcatctt 317

<210> 3975  
 <211> 572  
 <212> DNA  
 <213> Glycine max

<400> 3975

agcttctcat ttgatctaac agagaaggag catgcaacct atttcactca agtcacaccc 60  
 acggaactct ggcacaagag acttgggtcat tgccatcttg aaagaatgct aaacatgaaa 120  
 aaaaggacat gtcaaaaagg ctaccaatac tttctgatag ttgccaaac tataatgctt 180  
 gtcaatttgg taaacaaaat agaaaatcat tccccaaatt agcttggaga acctctcaaa 240  
 agttgcagct aattcacact gatgtggcag gacctcaaag aacaccatca ctacaaggta 300  
 gtctctactt tattcttttc atagatgact ttacaagaat gtgctggatt tttttcttg 360  
 aaattcaagc atgaagtggc tgaagttttt tgtaaattca agaaaatggg ggaaacttca 420  
 agggacctga agattcaatg aaaatgggaa agaatatcca tccccataat tatttacttt 480  
 ggggaacacc ttggtttgaa tattaactca cagcccccta ccctctgaac attggggatt 540  
 ttgaaggatt aacaattcat tgttggaag gc 572

<210> 3976  
 <211> 408  
 <212> DNA  
 <213> Glycine max

<400> 3976

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 ctccgattat taacagatgc tttctggtgt tgcatacgag ttgcggcagg atgagccaag 120  
 ctttcaatgg acccactcaa aataataaca ttgaagcttc tagagagtga cacgtagatt 180

atacaaatat aatagttaga aatagatagt atcatattat agctgatata tatcagatga 240  
 ctaacataag atgatcactg ctagctggac cgcgcgtaa aattcatgcc agtaaagtat 300  
 taaattttga ctttattaat tcttttaaca ctttttagt ggaaaaaagg agttgaatat 360  
 atattgatgc ctactatatt cttatatcaa aaacagaacc gagttcta 408

<210> 3977  
 <211> 365  
 <212> DNA  
 <213> Glycine max

<400> 3977

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 ataggtaaaa gttctatgac tcaggggggt ctagtttagt tggttaattg agtgggaatg 120  
 taagtattgt aaatttcatt gtacttcaat tgcgacagat aaaagaaaaa gataaaattt 180  
 ttacatacac tacaattata ggtgtcattg taagtgtgta ttggtacagg taactttttt 240  
 gtagtgtaa cacctgtagc gacctgcctt gtcaatacga aatctctact ctaaaacacg 300  
 acatttcaat tttttcatga tatacattca ccaaataagc ataaacatgt gtgtgtgtgt 360  
 gtgcg 365

<210> 3978  
 <211> 345  
 <212> DNA  
 <213> Glycine max

<400> 3978

ttaaataatt cattcttgggt tgggcgtttc ttataaagta atatgaccag gacaccattg 60  
 gagagatgtg atcttctaag tggtagtagg acaacactaa ttttttattc attattcgca 120  
 ccaacatcct tgaatttctt actatcagta acatggctta cgggattcat tgaatcctt 180  
 agtgagctta cgatatgaac ttgatcaatt gaaatttaag catattttta atttgcatta 240  
 tgtttgtctt tcagattaat tatatattat aaatttgttt ttctaattctt cgcacaaggt 300  
 ctaagtctac tattcttaga tgataaacag agttcatggc acatg 345

<210> 3979  
 <211> 709  
 <212> DNA

<213> Glycine max

<400> 3979

agcttgtggg acccacatgg gtccatgaca tatggatttt aggatttgtt ttttttcttt 60  
cttcaagggt ttgtatacaa taaaatcggt aaggagttgt ggcataatgcc aaaagtgggc 120  
aatagctttt gcaggggaca ttgtgctcaa gcccaacaat tagtaccatt tccaccaaatt 180  
gatttgtgca gttttacatg agaaaagtcc atgagagaca tcctcataca ttagattaca 240  
aaaagcacat gctataccac cttgaagagt gacttgcctt ttgtgtaggt ttacctttgt 300  
aagtaaccta tctttcaaaa ctctccaaat catgaaagta atcttttgta ggattataat 360  
ttgccataac cttttaaaca catcaactta ataagtccta atccttaatt cattcaaggc 420  
acgatagggt gatattaccg tataaaacag tggcaatgcg gggttttaagt tactaaagac 480  
gtacgccccat tgtaaattt acctcccaa attgctagac ataacctttt tttttataac 540  
ccttttttcc aaataaaaat accccacttg ttaaacttac ctctataaat attttccttt 600  
ttattatttt gatttttttt ccaataagga tcacctttgg gaaactactt gcaattttcc 660  
tggaatgaga aagatccttt aaaaattgta ataaaaaggg gtgaaaaaa 709

<210> 3980

<211> 436

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 3980

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aggacttgat aactgccttc attaggcaat atcaatacaa taatgacatg gctctcgaca 120  
gaaccagct gcaaaatatg agcaagcggg agcatgagtc ctttaaggag tacgccaac 180  
ggtggagaga cttggcggca caagtggcgc ccccatggtg gaaagggaaa tgataactat 240  
gatagtggac aactgccag cgttctatta tgaaaaattg gtgggttaca tgccctctag 300  
cttcacaaat ttagtatttg tgggcgagag gatcaaagta ngtctgaaaa aggggatcag 360  
cggttaatgc ggtggaagaa atgtgacctc agaagctgaa gtagttgaaa gatgtgataa 420  
cctcgaggaa gtttat 436

<210> 3981  
 <211> 286  
 <212> DNA  
 <213> Glycine max

<400> 3981

agcttttctt ggaccttagg caaaccttca actcatcctt catgatcaaa ctgtctactc 60  
 gtgattggtc cctttctctt ctccggagct taagctcgct gttactgccc ccacagagcc 120  
 cctcggaatt tgttccggcc atgttcttcc ctacgagccc ttttgggtctc ttgttccaag 180  
 gccttgggtgg tagctatatt tgcattcttc agtccggcat tcttctttcg gatcttgaga 240  
 gctgctgatt taaacctttc ttttactgtt ggggcttctc caattc 286

<210> 3982  
 <211> 605  
 <212> DNA  
 <213> Glycine max

<400> 3982

tcctctctaa gcttcttctc caatgaactc tcttgggtgt gatgctcctc cttccatggc 60  
 ttattcccta gtggatggcg cctcctctca cctcttcttc tttatcttcc actgcatctc 120  
 cacaattgaa aatcaccatt gaaggacctc attgaagctc aaagatccaa cctctataga 180  
 agctttctcaa gcaagcttca atcatataac cccatagtca gtatcacatg aacaacatat 240  
 tctcccccta atggattgac aacagtttca gcattgctct cctttgtgct caccgtgca 300  
 cctaatacct atatatccgc cttaatcagg ggtgagtact gcgatccctt ttggaataac 360  
 tcatttttga tggcttcttc caactcttgt tttattttct ctagactcag tttgttttct 420  
 tcttccactc ttccttaaag tttccgatta tctcattctt ccaatcttct ttaaggattc 480  
 caattatttc acccaaattg tgttgggtga tggatgtaaa ggaattgtta aaccacgtga 540  
 tgccttcca tagttgtgac tgatttcaca ctaaaccat tgacgaaca tgacctacgt 600  
 gctcc 605

<210> 3983  
 <211> 528  
 <212> DNA  
 <213> Glycine max

<400> 3983

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aatctgtacc tgtcgcaagg gtttgtggtt tgggctcctc tgctgaccac catacagacc 120  
tttgcccttc catgcagcaa cctggagcaa ttgagcagcc tgaagcttat gctgcaaata 180  
tttacaatag acctcctcaa cctcagcagc aaaatcaacc acagcagagc aattatgacc 240  
tttccagcaa cagatacaac cctggatgga ggaatcacc taacctcaga tggcccagcc 300  
ctcagcaaca acaacagcag cctgctcctt ccttccaaaa tgctgctggc ccaagcagac 360  
catacattcc tccaccaatc caacaacagc aacaacccca gaaacagcca acagttgagg 420  
ccccccata acctttcctc gaagaacttg tgaggcaaat gactatgcag aacatgcaat 480  
ttcagcaaga gaccaaagcc tccatttaga gcttaaccaa tcagatgg 528

<210> 3984  
<211> 481  
<212> DNA  
<213> Glycine max

<400> 3984

ttgccttttag ggcttgtacc tcatcacttt cttccgaagc tttaacctca ttgtctctca 60  
cagtatttag atttgggagc caatccaatc cttgtgtccg gactctcagc cacttatgat 120  
agccgccgat gatccatta ctgcttcccc taagctctct gttctttctt cacaccgcat 180  
cacatgcctt gcaaactcct tggagtacct ttgcattggg gtcactaaaa ccccggtgaa 240  
tgaaaggcgt gatgctttcg tcaaattggcg ctctctcat ggggtagcca agctgtctta 300  
tggaaggac aagattataa ttatataaac cccttggtcc cattaaggga acatttgga 360  
atccttcgca tgaagataga atcctgattc tttcttctt ctagcgaggg aaccaattaa 420  
cagacgcccc tctatgctaa ccaagaattg gtcccaattc gtctttctt ttcggcgca 480  
c 481

<210> 3985  
<211> 595  
<212> DNA  
<213> Glycine max

<400> 3985

agctttcatc tagccaagat tatacaaaag tggtacaaga gggcctaacg gtttctaattg 60

[illegible]

<400> 3986

<400> 3987

1694

actatggcat catttctggc gctaaactgc tgggagttgg aagccatctt ctcaattaaa 120  
 tttctggctt cagcaagagt catgtctcca agggctccac cactggcagc atctatcata 180  
 cttctctcca tattactgag tccttcataa aaattttgga gaagaagcta ctccgaaatc 240  
 tgatggtggg ggcaactggc atatagtttt ttaaactctt cccagtactc atacaggctc 300  
 tctccactga gttgtctaat acctgagata tccttcctga tggctgtggg cctggaagca 360  
 gggaaatfff ttttctaaga atactctctt aaggatcatc cagcttgtga tggaccttgg 420  
 agcaaggtaa tacagccagt cctttgccac tccttctaataaat gagtaggaa aagccttcag 480  
 aaatatgtga tcctcttggga catctggggg tttcatggtg gagcagacaa tgtgaaattc 540  
 tttcaaatgt ttgtgcgggt ctacactgc aaggccatga aactttgga 589

<210> 3988  
 <211> 546  
 <212> DNA  
 <213> Glycine max

<400> 3988

tcttatccaa ggcacatttt tgggtggcaaa gctccttctt ccatagctta ttccttagtg 60  
 gatggcgctt cctctcacct cttttccttt atcttccgct gcacttccat ggtggaaaat 120  
 caccattgaa agacctcatt gaagctcaaa gattcagcca cctcttctcc tttatcttcc 180  
 gctgcatttc catggtggaa aatcaccatt gaaagacctc attgaagtgc aaagatccag 240  
 cgacctcttc tcctttatct tccactgcat ctgagagttg tcaattgctg aggagtgaat 300  
 ttttctagcc actatcttgt agtcaatctc aaaaactact tgatccaggc caagcaattc 360  
 tacaaactcc atggcagcta gcaaacccta cgctccccc tcaactaacc acatgcacag 420  
 ctccctccac aatgtcctag ccatgacaat tactcctcta gcatagcgga tgcacatccc 480  
 aactcctgta cagttgctct gagcaaaaaa gccaacatct acattgcact taacaaatcc 540  
 atcctc 546

<210> 3989  
 <211> 462  
 <212> DNA  
 <213> Glycine max

<400> 3989

catgcatgca ttgatacata catgtgaggc actagccact gtatgtccaa cttctaagat 60  
catttattcc ggcattgtata tagatggaat ttgagcaaaa aacagccaag agccccatat 120  
atagttcaaa cggttcactct gcctcataaa agaaaaccaa aataatgaat gtttacatga 180  
attaacaata actccatatg tataattaac aataagggtc acctatctat atggaagctc 240  
ataaatgaca ttatttataa caattatgct ttgccatat tgaggctgtg ggacaatata 300  
attatcctgt attggtcttg gatgaggggg agggaaaagg attttaatgg tccttatcac 360  
caatgggggt aatctatggc tgtgggtttt aaataccgaa aatgtctgtt ggattgggtg 420  
gaatagctat ttgataggag gttgcatatt tttatttact tt 462

<210> 3990  
<211> 603  
<212> DNA  
<213> Glycine max

<400> 3990  
aacatgatca cgcttattaa ttactcagtt ttatttcatt ttgactagaa tttttttttt 60  
aagaatgaat tttgactaga aaattaatca catatttatg tttatcttta catttatata 120  
catacaggac atatcatatg agagaaatat atatttatg agagtgagaa aattaaatct 180  
aatccatata actaaaatat tgatcatcat catttaatgt catttgacct cttagaagaat 240  
catgtgactt tttgacatta aatcttaatt ttttatatat gattatataa ttcaaattta 300  
atcatttcac tctcatataa tatgttttct cttaaagat atgtcatata tatataaag 360  
gagaagggtg ggatattttt acatataaaa ggagatggtg aaggtagttt tgaaagaaaa 420  
tcaaattcat gaggatcact ttaatttatg agaaacacat ttcattatgt taattgtcac 480  
ctaattgtaa ttcaagattt gggttaaaac accaggaat aaaaataaaa attttaatat 540  
attatgtact taaaacaaca aaaaaattat tttggactca gaaacaaaat cccttcttta 600  
tta 603

<210> 3991  
<211> 308  
<212> DNA  
<213> Glycine max

<400> 3991



catgcctgct tatttaaaaa aaaaaaacgt aattttttct tctaaaagcg tcatggaaaa 60  
 aaatatccaa accgacccaa atgtgtttga gtaaaagcat atttactacc accatacagg 120  
 gcactgtcct ttctagccaa aaagtgaaaa tactatgcgg ctcaaaattt aaacttagac 180  
 atatgttctt gtgccaaggg gttaagggga cagcaacttc tgtcatcccc tcttttggcc 240  
 cttatatatt tatgaactcc acaccttgat gtagaaaatt caataaactt tttgggtcac 300  
 ccgatctt 308

<210> 3992  
 <211> 539  
 <212> DNA  
 <213> Glycine max

<400> 3992

tcttgaacgt gatcaatata tttattggca cagaataaag gatgaagatg tgggttcgtga 60  
 tatcttttgg tgtcaccttg attcactgaa gttagtcaac gcatgtaatt tgggtgtttt 120  
 gatagacagc acctacaaaa caaacggta tagactccca ttgctcgatt ttgttggggg 180  
 gacaccgact gggatgacat tctctgccgg ttttgcata gtggaggggtg aacgcgttaa 240  
 taattttgta tgggctttac aacgcttctg aagccttttt ttaaagcgtg atgccctccc 300  
 tggagttatt gtcactgata gagaccaagc attgatgaat gtagtgaaag atgtattccc 360  
 tgaatgcaca aatttgttgt gcatctttca cataaacaag aatgtgaagg ccaaagttaa 420  
 atcactaatt gcgcaaaaaa atgcttggga ttatgtcatg gattgctggg gatctctgac 480  
 tgattgtcct tcaaaacaac agtttgatga atgccttgaa taagttcgaa atagcttgc 539

<210> 3993  
 <211> 923  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 3993

cactcacgtc aactgcgaga tttctatagt acgtcataca tacactagcg cagcgctaa 60  
 ctgcgatcga taacttctat agtaatcaga tatgtataa annnnncaag agagttgaga 120  
 tcgtgagcat tcgcgcacgc atcnatctta tctacaagca tgcagctagc agctaactga 180



tatacatata tcttagtatt ttgtactac a

631

<210> 3995  
<211> 382  
<212> DNA  
<213> Glycine max

<400> 3995

agcttttaat gcataatata cacgcttacg ggttcactct cgcttcgtac agactaatat 60  
taatctcgtc tactttggca accctatcat gagcatctaa aagagttata accactcgat 120  
aaagccgaaa catcgctaaa tctatgccaa aatgaatctc atcccatggg cgccgtacac 180  
atcgtctata ctatgcttaa aaataaagtt caaccgaccg tctctgtttg caccttatat 240  
tatcataaga acggatagcc ttagccaaat attgactata aaagaccttt attgttccat 300  
tcaaaaataa cgctgtcaac ctaaggctaa aaacaactct cagaatgtgc tgatgccacg 360  
aaaagggtca ttccaaactg gg 382

<210> 3996  
<211> 414  
<212> DNA  
<213> Glycine max

<400> 3996

gctgtgtgct caggggcgcg actccagagt tcgggtggcca ctgactgcga ctaagatgac 60  
ccgaagacgt tgcatttcgt actagcatgc ttctctgagt tataactatg aaaaatggtc 120  
gtggaggaca gacatgggtca gtatataacg accatgctgt gaactgcttt ggcaatcaaa 180  
gcattctttc actgctcacg ctttagagca atcctttaca agccgcgaag cgctttgagc 240  
ttctgcttct tctttgcacc gatcgatctc tgaagtgttt ctgggtgtcc aaaccttgaa 300  
aaccagtgcc atgcatactt tcatactctt gacctatgc catccaaaga tctaccacgg 360  
actaagcgcc tgaattcgcg acgtgtctct cttcttctt ctcgaaagga acca 414

<210> 3997  
<211> 601  
<212> DNA  
<213> Glycine max

<400> 3997

agcttggttac taattagatt agattattaa aaataatata gcaaatagga gcaaaaataat 60  
 tgtcatcgat tgtgacgtga ggtgattata aggatgttca catgtgtgaa aactcaaaca 120  
 gagtcaaate aattcaatta gttcgatttt aattttgaga gtttgaatta aactcgattc 180  
 gattcaatat gtataaaccc gttaaattgt tggggatgct taaccggctc agttttttta 240  
 agccgtgatc caacctaat ttgcattgat ctgacattta attaaattta ttacatatat 300  
 atattaaatt attaaatata taatatttta ttttttaaaa atactttact aaattattaa 360  
 atcaaattat tcatgttttt tattatattt tcatcttgat tttatttata tttttcatat 420  
 tattgcatta tttgattttt tttaaaaaat aaaatatggg atatattagc atttaaacaa 480  
 ttcatcttat caaacaata tgtcacaatt taatttat tt aaaggacatt ttcatatatt 540  
 taaaaagttt aagataaaaa cttttttattt aaaaacttta ttttataact cactttgaaa 600  
 t 601

<210> 3998  
 <211> 558  
 <212> DNA  
 <213> Glycine max

<400> 3998

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 ggtagtgaag gtggcttatg gggcgggaat gatagtactt aataactaaaa atcaagctga 120  
 agaaaatttat gttgatcttc atattttgct agccacttcc ttaggagcct ccagtggtaa 180  
 gactattaag acctatattc tatctgataa gaaaccaaca acttcaattt cctttatggg 240  
 aataaagtat attgaccctg caccagtaat gagagcattt tcttctaaaa gaccaagtat 300  
 agtgggacta gatgtgactg acccaactgc gaatatcttg gctgctcggc cactaaaaac 360  
 taaccaagt tttatcatga atgacataag agaagtacta tttaacattc tcttaggtgc 420  
 ttcaatgtct atgcctaattg ttagtggcat agcaacactt tttaaatatt tgcacactga 480  
 ttggtcccct gcagctatca aatctgcttt gatgactact gcttacacat tgaacaacag 540  
 aggagctgca atttcata 558

<210> 3999  
 <211> 440  
 <212> DNA

<213> Glycine max

<400> 3999

agcttggttac aaccaatatt ctttgccta ctaagtcatt gttggctcta acacaaatga 60  
gaagatttgt tatttttgatt gcacaatgac taatggtaaa ttactttttg agtgggtattt 120  
tgtgtgagtt tttgtgtcat tttgcatgta tttttcttag tagaactcat gtttggacac 180  
tagttttgta ttgcagaagc ataaccgctt aattgagtga aaaaattaaa gattacacaa 240  
atztatcaag atttgatgac ttacacttg atcacggccg tggtagattt accacgacca 300  
tggtaatcaa cacaatgata ataaagtgat aacaatcctc taaaacaatg tcaaaatccg 360  
ataatggtcg tggccaacta atgggggtca tggccaacta agatggatcc attcatgagg 420  
gtcgtgggta atccataatg 440

<210> 4000

<211> 619

<212> DNA

<213> Glycine max

<400> 4000

tctagaatct agtggttttgc gaaatcaa at tggaatttgg aacagtgcga cgttgctcat 60  
gactttgagg tccctcaatt aaagggttag tgtaacattt gagttagtaa tttcagtgt 120  
aactggaaaa tttaatgtat agtatacttg tatacattta gttgtaattg tatagaattt 180  
ttagtaaaag agaaccacaaa ctaatataag attaccagaa atgttaaaac taaaatattt 240  
aaaatgcaaa acacaagata caacatttca cttgttatta aataattatg aacaaagtca 300  
ctgagttgaa aaccaactct aattatacat aacacaactc aacattcaaa gttgtaaaac 360  
cccccaaaag taaaacataa gtcacccctg aaaagaataa atgaaaatca aatctaataa 420  
aattgaaata cgtaatatat tatatataat aaaattgtct agttcaaaaa tgatagtaga 480  
atcattccca acatcatttc tcacaaaata caccaaagag ttataaacat aagtttatag 540  
agattgatag agtataatgt acttaaatta caaacaatg cagaatagaa cagagttaga 600  
ttttggattt gggaactca 619

<210> 4001

<211> 554

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4001

agctttctta attatatgtc tctctatata ttaaattttt aaaaatttat atatattttt 60  
actaccatat actttataaa ttaaaaaaat acattaaaag ttataactaat aaataaattt 120  
tagtagatta taaatataat aatgatttat tatataagat gaaccaaca gttgggtgtt 180  
gagtgggaca tttgtgtatt tgagcttatg aatagaagta gagggacta gtgaagagat 240  
aaagaagacg gaggcggttt ggagtatgac ttcttgcacc tcttttgcac cttttctcat 300  
ttctttctct tcatctcctt cattgtgctt cgcgcaaacc cactcaatca catgtaaaca 360  
acgcttccca tttccttctg taaagggaag aagaaagtgc tcaactttat cattntcatc 420  
caccaaaagg ctcgttacaa gagccgctga gtacaaattc ccaaacccta tttccgaatt 480  
tgcaaagcc gtgagtttat ctcttatctt ccattctatc actttatcaa gtgaataaaa 540  
ttaacttcat gttc 554

<210> 4002

<211> 424

<212> DNA

<213> Glycine max

<400> 4002

tgtagaacta tggttgattt tccctacggt tgttttttgt tccacttttt ctttgttcaa 60  
atatattcaa gggaaattcg gtttgccgga aagcacaccg gatcgtcaag tatttaaaaa 120  
ttaaaacgga tgaatccgag tatcgaacac agggactaa tgtttacctg aattaagtgc 180  
agaaatgaag cattgttgag agaacatgta tgattgataa tttcaaaca aatttaaact 240  
aacttttatg ctaaaaacta taaaaagcaa ggtaagtaaa agtgacaaca gtaggcagaa 300  
attgttgggt ctttctaaca aacaagctga tgcataataa tatatttctc taatcaatca 360  
gactcttggt ttctatgctg tagcctaaat tactaaacct cgatccctcg tcagaccgaa 420  
tcaa 424

<210> 4003

<211> 503

<212> DNA

<213> Glycine max

<400> 4003

agctttatca aatggatgta aaaagtgaat tctcaaattg ctttattcaa gagaaagtat 60

atgtagatca accccctgga ttgaaaact cagacaagcc caatcatggt tttagattaa 120

aaaaggcttt atatggctta aagcaagccc ctagggttg gtatgagcgt ctaaataagt 180

tccttttaga aaaggatttc tctagaggcc aagtagatac tactcttttc ataaagagaa 240

aattacatga tattttattg gttcaaattt atgttgatga tattattttt ggatctacta 300

atgaattatt gtgcaaggaa ttctctcatg acatgcaaaa tgagtttgaa atgtcaatga 360

tgggagaact taatttcttt cttggattac aaattaaaaa aaccaagact ggaatttttg 420

tcaatcaatc caagtactgc aaagagttaa ttcacagatt caggatggaa aatgctaagc 480

acatggctac accaatgagc act 503

<210> 4004

<211> 666

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4004

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aaaaatttcc atgattgcta aggtacatgc gaatattaca attaagttaa agatatcatg 120

aagaaaaata taatcatctt caatagatat tactctcttg aactattaaa tatataagga 180

gagattcact tgcttcactt caagagtaaa tagttatttt tcatttttat tatttatttt 240

tttaaaaatc taatgattaa gattagttac ttattaaata ataaaaataa aaaataacta 300

taaaagaatt atcttttgaa taagtggatc tctcctctct ttacatataa ttagcttaat 360

tgtagtattt gttgtttctc acttttatgt ctattacata aaactttagt actaaattgt 420

tgtaatatat ttctgtaggt ggaccgtgaa ttcaacatgg caatggacga ctagtgaaa 480

aaattgaacg aggatttgct gaagtgtgc aacttgcaac aagaatatta atgaatcacg 540

tacgcagcgt attagctatt tgaaggtttt aatacattat anactcgcat ttagtctttg 600

tagtttctca attgttaaaa ttgagtctct cacctcatat tttgtacaat atttaataga 660

aatgtc 666

<210> 4005  
 <211> 643  
 <212> DNA  
 <213> Glycine max

<400> 4005

agcttccatc aagtggatc agaattaaat aacattaatt attttgatga tgcttttgta 60  
 acctagatgg tagtttgagg gctagtcaa tgcaggatg ttgattgggc tgagctgcat 120  
 agaaagggat ttaattaaca tcctgaattt tggaaaattc gtataattcc ttgctttcaa 180  
 tctcttgga aattcatatc ctcttaaatt tattggtaat gcctgttact gaactaaata 240  
 gaaacaaaag tttttaagct gagatctgct acctgatgt tcttcatctt tccatccttc 300  
 agtttagtat tctagaaaaa ctttactgct tttccttggg tttaaacttt gattttctta 360  
 ttataaataa tttctctata gttgtctaac attatttgc tcatgaaggc acagtaaaat 420  
 atactttgaa atcatggctc acttctggat atgaagtatt gaaaatcaga aatatcctat 480  
 gggtaatgga acaccctatt tgataactta acttatataa attttgtttt tgggtcattt 540  
 tgagggtttt ttaatgatgg aattaatgaa aaaccttctg gtgggttttt tttcttcaag 600  
 ttatgacaac cagaacaggg atagcaagta ccaacccaat ttc 643

<210> 4006  
 <211> 339  
 <212> DNA  
 <213> Glycine max

<400> 4006

atactcaagc tcggtgatgg tcataagggtg ataacacatg gagtgtgtaa atgtgtcaat 60  
 atgaagatgg ggggggggatt gaagacattg tggatgcgtt tgtgttggag ctagggggaa 120  
 tggatatggt gttaggagtt gcctgggtta gcactcttgg gaatgtgatt atggattgga 180  
 aggccatgac tatgcaattt tcttatgaaa atgagttggt gaaattgcta ggtcaaggca 240  
 ataaggtggt caaacaatgt tatttgaact cctatcttga ggatactcat agcacaactg 300  
 aattgggctg gtgggggggtt catctacagt taatggaag 339

<210> 4007  
 <211> 213  
 <212> DNA



<213> Glycine max

<400> 4007

agcttcatgg aggctggatc tttcagcgtc aatgataacc ttcaatggag atgcagcata 60  
agataaagga gaagaagtga gaggaggcgt catcccctag ggaataaacc atggaaggag 120  
gatcttcacc accaagagag ggccttctc ttagaagctt gaagatgaag ctgccatggc 180  
cgaaaagaat gacatagaaa tttacggggg ggg 213

<210> 4008

<211> 585

<212> DNA

<213> Glycine max

<400> 4008

tctcccctat tttcctataa ataggggggag aaagtgaagg tttttatggt cagccctcct 60  
ggtgattcga gatcacttga aattagtga aaaaattatt tccgtgaaga aaatccaagc 120  
tgaggcgctt ccgtaacgtt tccgtgggtg atttctcgaa gattttcaac cggtcttcga 180  
cggtcttcgt cggtcttcgg tcttcaaccg ggaagttccc aaaatcgaac ttttcaattc 240  
attctatgta cccttagtgg tcttcatttg ttttcacgtg cttttatttt catttcattt 300  
acttttcgta cccctttttg acgtgcttta atcatttact taagtcattc tctcgccctaa 360  
tcaaaaaata aaatatattt ccaccgatca tttgaattgt aacatccgtt aatttttctt 420  
taaataaata cggaccgttc ggtcatgccg taaccactt ggaaaccaa aaaagggttaa 480  
ataataatat aatattcaaa atatctttta gttaaataaa tcacaaaaat cattcggacg 540  
ttgttctttg ggattttctt tcttaaatcg aattcactaa taacc 585

<210> 4009

<211> 401

<212> DNA

<213> Glycine max

<400> 4009

agctttgagc caattcaaac gacaataaat ttttactcgg atgtctgatt gagttcaata 60  
atatatcgag aactcgaata ttgaataccg aagctctgag caaattcaaa agacaataac 120  
tttttactcg gatgtctgat tgagtctcgt aatatatcga gacgctcgaa attgaatacc 180

gaagctatga gcaaattcaa aagacaataa ctttttactc ggctgtctga ttgagtctcg 240  
 aaatatatcg gaacgctcga aattgaatat agaagctctg agcaaattca aacgacaata 300  
 actttttttt cggatgtctg attgagtcctc ataatatatc ggaacgctcg aaattgaatg 360  
 tagaagcttt gaaccaattc aaacgaccag aactttttac t 401

<210> 4010  
 <211> 528  
 <212> DNA  
 <213> Glycine max

<400> 4010

ttacagcaga ttttagtgat gactcactaa cctacaatta aaataactta atgccattaa 60  
 cctagggaaa taaaaaaact taatggctga gtgtaactga aattgtggca accaaaagtc 120  
 accccaaca gccacaagt cagccaccat ttgggtctccc aaaaggctga tgcctaagtt 180  
 gccaatggg cccttattac aacttgaact aaaccttaact aaagcccttt tagttgatta 240  
 acccaaaaaca tttttttggc cagccaactt tacaaggatt gggccattat ttagacaaac 300  
 taaacactct aaaattgaaa caaagtggcg tcatttagtc ctctccatt tgggccatga 360  
 tacaactcac aaccttggac tttctcctt gaaacttggg cttgtattca aacagtatgg 420  
 acaacacttg ttgaagagct ttcttggctt tcttgcctc aaccttgtc ataagtcctc 480  
 caagtccttc aagtggatcc ttgccttgc tcttggctcat gtcctcat 528

<210> 4011  
 <211> 353  
 <212> DNA  
 <213> Glycine max

<400> 4011

ggacctgccg catgcatgct tgctattata tcatgtatct taatagctcc attggttgaa 60  
 atttcaagat tgagatatga actgtgtcca cgtgctatga aagaaagaca cttttggaag 120  
 atatatttca cacttgtaa cactcatgtg gctccgtaag tactgtatca tgctgatatt 180  
 ccatgtacta tgttatattt gacaatgaag ggggaaacta gcttttctat tttcttaagt 240  
 atttttgact aacttaactc tgattgtttc tttattcttc aaagaataaa tatttacata 300  
 aataaaagac gtacaagaag gaaaaatata aaatatgcta gttattagag tat 353

[illegible]

actcaagtct ttgacgattc acatagatta taagattaat ttttagtccg atattttaac	60
aaattttaag ctttcaaatt ggtttcttat tgactttatt gtacacaaaa atattattaa	120
gatataaatt tatgatataa cctcgcatga aaacttatta aataagtatt taattaaatt	180
tagggttggc caacattatt ccaatgcaaa ctttggagtg agcttttaca aaagttttat	240
attttgattt aggcttaaat gtaattttaa tcactttatc ttatttaata tggaatcttg	300
attcctttat tttaaaatag atatttggtc tccttatttt aaaaaataac taattttaat	360
ctctctattc taatatataa acatttggtc ctcttacttt aaaattttta taatttttgt	420
caaatcttta attttacata tattttattt attttatttt gatccaatta attcttaaac	480
cttacttatt tacaataaag aaatgattaa att	513

<400> 4013

1707

gaccctttgg ggcttattat taactcgtga atgcgcacaa aaacaccttt ggtcgttatt 660  
 gtgtatctct aaatctgcct cttttatgaa aggttaattc tattctctct ttgggagagt 720  
 ggtagttct cctacttct cgccatgtgt atgaattgtc accatatact cccactgttt 780  
 tctgccctat t 791

<210> 4014  
 <211> 461  
 <212> DNA  
 <213> Glycine max

<400> 4014

accttctggc cctactcata gttgtggcat gagaaaacat gctctatctt catctaccac 60  
 tccaaatagg gctccggat cattcttttc tttaaatgga ggaatgttga gtttaatacc 120  
 atcaattccg ttttgtctat gaacaccatc attcctctct ctctctcttt cttcttcatt 180  
 atgacctcta ttctccattt gateccaacct ttcatggagc gcatcatctc gttgggtcat 240  
 taacctctcc atatgttgca tcaaagcttg catttggaat tgcgaaagcc ccactccatc 300  
 attaagatta gtacctgaca ttctcaacaa acaaatcaaa cgtaacaaga caattatagt 360  
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 aacactcttg gcttttacca ctcttattcc ccttgagttc t 461

<210> 4015  
 <211> 455  
 <212> DNA  
 <213> Glycine max

<400> 4015

agcttgtaat cgattacaca catactgtaa tctattacca gaggagattt tcagaaaata 60  
 ttctcaacag tcacatcttt tcatttggtt cttgaatggg catcaaaggc ctatatatat 120  
 gtgacttgag acacaaattt gctaagagtt tatctgaaca acaagtgttt attctctcaa 180  
 aaagcaaaat cgttatatcc tcttaaaaat tccactggcc aatgcaattg caattcatta 240  
 aggaatcatt tgagtgtcga aattgtaaaa tctatctctt caagagagat tcattcttct 300  
 tctctttcta attcactaac ggattaagag accgcgggtc tcttggttga aaagaattct 360  
 aaacacaaag gaaggaattt ccttggtgtg ttagaacttg gaaaaggaat ttacaagata 420

tggtaaactct caagcggggtt gctatgggac tggac

455

<210> 4016  
<211> 253  
<212> DNA  
<213> Glycine max

<400> 4016

tatatcaaca tggggggggg atcgaaacca tttctgacgc cgtggtgtct gcactttggt 60  
gcatggatct gctgtcatga attgccctga ttgtcactct cgtgaatgtt tatattgatt 120  
gccaaagccat cactctacaa aagtcttatt aaaattacta tgggacaaat ctctggctct 180  
gcttcttggg ccatgaacag tgtaattta acgcccctct tgaagatgct cttgtcttaa 240  
ctgaggctga ctc 253

<210> 4017  
<211> 1195  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4017

accactcccg cacacctcgt aattagtcn ttcgcgga ctttctaacg ccattctgac 60  
ctnctcattt actatattga tatttagtan tctaactctgt aatacgnnnn nnaagagagg 120  
ttgtggatat gattcgggtg cagcagcctg ctatattata gaagcagccc ggcattgcaat 180  
gcattgtcct gagcattaag aaaaagctnc ttgtatcaaa tattatatag anctaggcga 240  
tcgaaattga ttggcatgtt gagagtaaaa tctctgacgc aataagcgac acacattaga 300  
gagacgaata attcgtataa ttgatgagaa atctattgtt atagaagaaa tagcgattca 360  
ctcacgctct atgacaatgg aacttatatg ctggggggcgc tttatgatga ggaagacaaa 420  
taatgtattt agtttttaat ggtgaaaaag acatcatatc cnttgcttta tagggatgca 480  
ccttttatcg ctgcgtcaaa gacctaacgc atatggtaga gacaaataaa agctgtaatt 540  
gaatctcccg cttaaagaaa aatcagagta tgggctatag acacaggaag ggtaacaac 600  
ataaaacttc ttatttcata acaaaagcct tgagttaact tctggacatt tgtatgatga 660  
tacaaaaaat ctcgtaaaa tcatctaaat tacatgggaa agtaacgtga tgtaattcaa 720  
ataagactta tactgacaca cccaaatagt aaatgttgca acaaactaca aaacaattgg 780

tcaatctaaa atggaatgga agtccgcggc caattataat actatagaat gtaaacccca 840  
 ataaagtcaa tggcgatgat tcggcatggc cacacaaagg gtactcatat ttgaggagaa 900  
 aataaaatga cccctaatat ccttggttaat aaattgntta gagagccggt tgacagctta 960  
 ctggtatcat aatatgttaa ggaatctggg ggccatctgc caaaagagaa ggtatcacc 1020  
 ttagtttata aacatggtag aagcggatct gtgtatacac aaggacctag ctccgtatgg 1080  
 atcaatcccc tgttcgatct gcactagaga atattcatct tatcttagac acatacatgc 1140  
 cgcagagacg caatatgtat cgtcatatat gtgctcaaca accgtcaggc gacca 1195

<210> 4018  
 <211> 520  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4018

ttgactttga gtcatcaaga gattataaat atgtgaccat ggcatgaatt taaagatata 60  
 aaaaatttaa gaatctatct ttcaatcatc tctcaacatc atctttcaac tctttctaca 120  
 gaattttctg attcatttct ctcatcttt ctaaaagttt ttgttcaaac actttgtttt 180  
 ccaagaaaag ctctttgttc aaaaacttgt gctattcatc tttttcattc tcttcttct 240  
 ttgccaaaag aacgaaggac taaccgcctg aattcttttg tgtctctctt ctcccttaca 300  
 aaagattgaa aggactaacc gcctgagaat tcttttgatt ctccctccc ccttaagcaa 360  
 aagatttcaa aggactaact gcctgagata tcttttgatt ccccttaca agattcaaag 420  
 gactaaccgc ctgagaattc tttgtncaa cacattggat tgtacatctt ttgtgggaca 480  
 agtagagggt acatctactt acggaatgtt atactgagaa 520

<210> 4019  
 <211> 620  
 <212> DNA  
 <213> Glycine max  
 <400> 4019

agcttgtagg taaactagat gccttggtta acctggtaac ccaactggcc atgaataaaa 60  
 aattttcacc tgctgccaga ctctatggtt tatgctctc tattgaccac cacacagacc 120

ttgccccttc tgtgcaacaa tctgaagcaa ttgaacaacc tgaagcttat gctgcaaaca 180  
 tctacaatag acctcctcaa cctcagcagc aaaatcagcc acaacaaaaac aattatgacc 240  
 tctccagcaa caggtacaat cccgggtgga ggaatcatcc caaccttaga tggtcgaatc 300  
 cttcacaaca acagcaacaa caacaatagc cttattttca aaatgctgct ggcccaagca 360  
 gacatacggt cctccaccaa tccagcagca acaacaacaa caacaacccc agaaacaaca 420  
 aacagttgag gctcctccgc aaccttcctt tgaagaactt gtgagacaaa tgactatgca 480  
 aaacatgcag tttcaacaag aaaccagagc ctttattcag agcttaacta attaattgga 540  
 caattggcta catagttaaa tcaacaacag tcctaaaatt ctgacagatt accttcttaa 600  
 tctgtccaga aatccccaaaa 620

<210> 4020  
 <211> 702  
 <212> DNA  
 <213> Glycine max  
 <400> 4020

tctatgggat caacgtgtct atcatgtggc caacaatatg gatgaggact ccaagcatac 60  
 cttaatatgt gaaggtgcac tagttgctaa aaaacacaag gttagcaaaa ctaacctgaa 120  
 ggctatgaag gtggacttgg gacaaacctg taaggaagct ctataagtgg gcgtggaagc 180  
 catcctaaat cgaaaacaaa gaagattggc caagtccatt gttgaatttg atgagataga 240  
 aatgaacatt ccaacatgta cgatgcatta gatagagagt ttgtctgggt aattatagga 300  
 taagtgtgca ttaaataatta tggctgtgca atgaaaaaaaa catattcaag tttttaaaat 360  
 gaattatatg tattgatgta acatcctcag ctttacatct taatcatcaa gcggatagta 420  
 taaacgcata tgatattggt actcaagagt ttataagtta aagggactac attattctca 480  
 agtaattata tcatatacaa caaaagaagt gatccaacac atgggaccct tacatcaaca 540  
 tataacaagg tttgcacaaa gaagtatcta tcagacatta atgacaaaac atagactctc 600  
 taagccccct tgtttcatcc tttctacatg tttaatctgg aacatccaca taaactaata 660  
 atacatggtc tcagtcagtg gtaaaacatg tagcatgcct tt 702

<210> 4021  
 <211> 532  
 <212> DNA

<213> Glycine max

<400> 4021

agcttctggt gggacatctt gacttgcttt ccaatctgac attcaccaca gattctgcct 60  
tcttctatct tcagattggg aatgcctcta acagcacttt tgtcaaggat tttcttcatg 120  
cctcttaagt gcagatgtcc aaacctttga tgccatattc tgacttcata ttctttggag 180  
gatagacatg tagaggagta gctggtttct tggggtgtcc ataggtaaca attgtccttt 240  
gatctgctgc ccttcattag aacttcactc ttctcatttg tcaccaagca ttctgacttt 300  
gtgaagttta cattgaatcc ttcatacacac agctgactga tgctaataca gtttgcagtc 360  
agtcccttca ccagcagtac tttgttcaga ctaggaagtc catcatgaac tagctttccc 420  
attccaatga tctttccttt agagccatct ccaaagtca cataactagt ggagcagggc 480  
tcaatgttca gcaagaattc tttgactcct gtcatgtggc tggaacaacc gc 532

<210> 4022

<211> 600

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4022

tattcagggg atagttgatg atcgtataca accagcagga gttggcttac aacaggccaa 60  
tctatggagc agtttctgga aaaagtggca tggcctaaag ttcagctccc tctggaaaga 120  
gcccataagg ttgttctctc tggacctgta ctagctagga ctgagctgac atcagctgaa 180  
ccacaacctc ctatagtaga tccacttgct tctccgaaac ttgagacatt gtctcctccg 240  
gcaccacctc tgataatcat ccccgatgac ttagctaata aagctgctgg ttctcctaata 300  
tcaccatctt gcaacatgca acatagacga tggttctgac ttttatgact ggatggactg 360  
ttgaggaagt tgtggctcat actgacaaga atgttgatat ccttgatggt tttgtgttct 420  
tctgttggtg ccttttagat tattattatt antaatttgg ttttcgtaca atatttcctt 480  
tatttctaca tatactgcta gttntattta tgggtaaata gtttgctcat cctaaatcat 540  
tttgaacagt ttgacttggt tttgatgaca tggcaggtaa acactctaata ctttttggtg 600

<210> 4023

<211> 745



<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4023

agcttgcca caaaaaatag ggtttgaaag tttatcattt cagtttctta ccaagtaaaa 60  
aagatcattt ttaaagtcca acgccttaaa agtgatcaca attcaagtaa aaagaatcgc 120  
ttgattcact cttaagaaaa aactacgtac ggctgatttc ctctccaaag gaagatacgt 180  
acgagcaaaa gccccgcttt tgtccaccct caaaaaaaaa acaataana ggttaaggta 240  
atacaatttt caccattttt aaaaataagc tgctgtcctt tgtaaaaaac gggagaaggg 300  
gtaatacctt cctcaaacgt taaaaaccac ccccccaact taaaaattat ttttaacggg 360  
gttcttttgg gtttcccacc gtttcccaa ataaaacgtt ggggggaccc cccccctctt 420  
tttttcttt ggaaaagacc accccggagg ctccccctt tccccccca aaaaggggcg 480  
ttgcgaccac aagagattta aaatgggctt gccaattttg ggggcccggc gaaataaaaa 540  
aataaaccce ctttttttta attttaaaaa aataagtttt tttgggcaaa aaaaaaagg 600  
gggaaagggt tttttttttt aaaaaaaaa agttttctta tatactcca aaagggcgcc 660  
cccctttttt ttctaccgac cccctctttt atttttccac tctttaatga acccccccca 720  
aaaattctct ccccttattt tttat 745

<210> 4024  
<211> 539  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4024

ttataagcgc gggttcgga gacaaaggtc aagcgttcac gatatgcgaa gatgatattc 60  
cgagtacttt ggatttggtta cgaccatgcc ctctgattt ccagctggga aattggcgag 120  
tggaggaacg ccttggcatt tacgcaaaa gcataatgta aacctttacg gttttaaaag 180  
ctctatagtt gggcctaggc tttagagttt ttcttttgt taaggctttg tgtcttttgt 240  
ttttgaattt ataatacaag gatctttctt catctgttcc tggctcttac ccattcttat 300  
tcatttgcac gtttacttct ttttctaaaa cggcagatcc gatgacgagt cccccgagg 360  
tactaatacc tgggacacgt ctatcgactt cgagcaagaa atgaatcaca cggaagatga 420

agganatgag gatgtgggac ttccccaga actagaaaga atggtcgccc atgaggacca 480  
 agaaatgggg cctcatcatg aagaaacaag ctagttgact taagaaatgg cagtggaaa 539

<210> 4025  
 <211> 530  
 <212> DNA  
 <213> Glycine max

<400> 4025

agcttcaaga aaaggccaaa ctcttctcca aaatctgatt tcaggcttaa attggtggct 60  
 tttttcgtgc tcatgcgctt agcgcaattt tgaaccgctt agcgtgaatt agtgaatttc 120  
 ggcttagcgc gtgcttttct cgctcagcag atggactaaa gcggtgcgct tagaaagatg 180  
 accctttgct cagtgaacat gcacaactta tccttcttcc agattcttct ttgcgctcaa 240  
 ccgaggagtg ttgcactcag cgaatgactc gctaagaaga caggttggct tagcgagagg 300  
 gtaaaaatca gcactataca aactcaccta attaacctga aattgagaga aaataattat 360  
 taaacacaaa aaatggaagt actaagtatt tattaactat ctttaccxaa aagtaattac 420  
 aatactacaa aattgccata aattggagga gtttgataca atttatacaa gttttataca 480  
 caaaagttag tcgtattcat cgactaacag gtatctcttt gggaaatata 530

<210> 4026  
 <211> 370  
 <212> DNA  
 <213> Glycine max

<400> 4026

tcttcttatg caagcactct attggtggag aagcttctcc ttacatggct cattctctag 60  
 tggattgcgc ctctttcac cttttctcct atatctttct ctacaactcc atggttgaaa 120  
 atcactattg aaaggcctta ttaaagctca aagatctagc ctccatataa acatgtaaac 180  
 caagctttca tcaagtggta tcagagcaca ataccttcac ctatgtgctc cttaaaccctc 240  
 cattaatttt cagctttacc ttctctcca ttgatgatgc ttcattatc tccatgtatc 300  
 tcctcacatg tattgtgctg aatgttggtg acatgattat tttagaattc ccaactgatta 360  
 aacttgctat 370

<210> 4027  
 <211> 526  
 <212> DNA  
 <213> Glycine max

<400> 4027

agcttctaatt tcaaaaagtt ttggatgtct ctggcttttg tgacacaaat aaatacaagt 60  
 ttcataattcc agaatgtcat taagggccct ccttggttca aatgatataca tgtgcatggt 120  
 gatagatatg gttatggtgt gctcttcag acatgcatat attcctgaat catataaggg 180  
 agtagggaca atctcctaaa aatgaaccac cagccctatt atagcttgca atcagcaggc 240  
 aataggtaga caaacctatt gtccttaagg attgaaacat tttactgatt agtaattaaa 300  
 tttgattgtg attctcttat gggcatagac ttgggtctact tagatttttag ctagtccctag 360  
 ctagctccta ataatatatc ctaaccttcc attggaactt ggaagttgtc ttacaaaaaa 420  
 ttgataattt gattttacaa tgaaactaga ctattagtat gtaattaaca aggagtagaa 480  
 tatagattac aacctcaact atgttgctaa ataccaagtt tgtgta 526

<210> 4028  
 <211> 591  
 <212> DNA  
 <213> Glycine max

<400> 4028

tgactcattt atttaaacia acctaattat aagcttgagt ttggcttttt tgaaaaaact 60  
 aaagcatgag cttgagcttg aatgggttag ctcatctaaa atttgattat tttttaactt 120  
 gcaaaaaaat tattaatca ttttttaact gtcaatttat tatttaataa aatattttta 180  
 tactatgtaa taatctacia ataaaatag tgtaaacaat atgatatgat attgtagaat 240  
 ctatgtaatt ttaattttta tattctattt ataaacgagc tatttatgag ttattaatgt 300  
 caagcttgta aaacttaggc ttagcttgag ttgttttatt tcattaaaca aacgagtttg 360  
 atggagcatt tagcaagttg aactcgagaa gttcacgaat aacttgactc atttacatct 420  
 ctatctagaa atacttttga atttttaatt aagtgtcgca ttatatatag attgttaaca 480  
 tagtggtaat aaatgacatt tgtttatagt gataactatt atttatggtg atgaaaattg 540  
 aatgaaaaat aattttcatt tatagaaata agaaatatta tattttatat t 591

<210> 4029  
 <211> 501  
 <212> DNA  
 <213> Glycine max

<400> 4029

agcttctgac gagtgattat cgatcctctc atcaccttca ataatatctt tgactatata 60  
 tataattgat attttttcac aataaaccac taaaaataat ataacttata gcacataatc 120  
 aaaacactac gatttgaaac attttttcag caatttattt tatcccgtag ttttaaactg 180  
 ctaccaattt taaatatttt tgttcacctg ttactatagt ctttatttaa agaaccttgc 240  
 tatttggtag gaaatataca cgctagaaag tagctaagac atacctgaac caatcacggg 300  
 tgtatggggg cacttaaaat ctgatgatta atattttttt cttcaaaaat acaatttgta 360  
 actagtatgt aattttttcg tacaatatc atctttttcg ttattataaa tactcaagga 420  
 caaatatggg acatcataaa tgaagccac ctctgtcagt ataataaaaa attctaacac 480  
 aagtgaataa gatcgaggac a 501

<210> 4030  
 <211> 553  
 <212> DNA  
 <213> Glycine max

<400> 4030

tcaggattgt gtttagaaaa aaatatcccg tgaactccat ccacaatctg agttgagaaa 60  
 agtcaatga aaatgaagga aagtagtagt tatggtttca gaaatcaata aatgatgaaa 120  
 aggaaaaact agaacaaact tacatatattt tttaacctg aaaaatcaag tacaacgaca 180  
 ggaatttcaa atgtcattgc tctgattaat aatggaggaa aacctgcac ctcttgagca 240  
 gaaccatata ggatgatatc agccattagt aacacactat tcacatcacc attcaagcca 300  
 tagtgcctta tggaacctg acgaagtccc atacgtgaag caactcccta catagacagc 360  
 taataaatca gtaaacaatt caaagacaat atattcaagc tgagatatcg tcaactaaaga 420  
 taagtcaaac ataataaaac agagcattgc cacaaatata ttctgagagt tcatcttcaa 480  
 aatttctatt tctatttttt cagtatcaaa ttacattac aatgctcaat tttggttcat 540  
 gtattctttt att 553

<210> 4031  
 <211> 311  
 <212> DNA  
 <213> Glycine max

<400> 4031

agcttgcata ctattgtttg ataaaacaaa aagaggatgg taagccttgg tatttcgata 60  
 tcaaacgata catcaaggac aaagaatacc cgctgagggc ctctaacaat gacaagagga 120  
 cattacagag gttggcaacc agtttcctcc tgagtaggga tgtcctatat aaaagaaacc 180  
 atgatatggt attgcttcgg tgtgggaatg caaatgaagc tgggcagata ctaacagaag 240  
 tgcatagaagg gtcatttggc acccatgcc aatggacatgc catggcccaa aagattatga 300  
 gaagtggata t 311

<210> 4032  
 <211> 540  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4032

ttaacaccaa aatctttctc caatcgacc aaaccctaac ccctaaaacg cgtggccaca 60  
 atgataaaga cgaggaccag acatcacact cacacgtcgt ctaaacataa ccctccacga 120  
 tagcgacaac gggccaaatc attaaccta atcgcttct atggagaact ttgacagaaa 180  
 cctagcaagc aacagataaa catattgatt ggtcttctga agcaatgttg ttatgtcctt 240  
 tccatatgac acaaacgatg tctttttctt tggttttata aaataattaa tccaacatgt 300  
 ataaacatta acaccaaagg ttacacatgg caacacgtgt aatcttatgt gtccagttga 360  
 cgatcacgta ggtagataac gattttgaac taacagcaaa gacctaagac aaaaattttc 420  
 aaatattagg gacccaatct aaaagataaa tttatcagag accaaatgta aaaaacagat 480  
 gtttatcaag aatcaaaaac atattttaa cttcttttcc tcaaagntaa atttgatgag 540

<210> 4033  
 <211> 283  
 <212> DNA  
 <213> Glycine max

<400> 4033

agctttatat atgaaattaa ggacttcac atcgaccaac aactttatac tgaaataata 60  
tctcacttaa cattgtaata tccaagacat aggaattggt ccaagtaaaa ggacatgaga 120  
attgtacctg tgtgtagata taaacttgga gaatatttag gacaatcatt tatgtcatgt 180  
tctctaacat aagctgttaa cttgaataca tgggtaatat ctttgaaatt tggccccctg 240  
ctgagggtta tacctagcag cctatgtagt actttttctc cat 283

<210> 4034  
<211> 470  
<212> DNA  
<213> Glycine max

<400> 4034

taccaataaa cttgttcttc ttaacaaaac cttttatatac ttcacagagt agtgctaaat 60  
ggtaccaaaa caaaccttt tatatcttca cacagagtag tgctaaatgg tacgaaagac 120  
ttcagaaaat tttaacgaaa cagatgtttt aatataattg gcaaattggt ttcaatttaa 180  
tagataaaaa ggatttgata attaacgaaa atcataggtg atcacacaat atatgcagta 240  
ttcgtgcaat atgaattggt aagtaattcc cttttattaa tttagcatgt gaattggcat 300  
gaaacctgta accagaactt ccaccatga ccaaccaatc taagatgctg ttcttctata 360  
tagactcaag gaagaaaaaa gatagttaac tcgtgcaatg cattaataac gaaaattgtc 420  
attagtaaca attttttttg tctaataatgc attaatctct tgtatgatcg 470

<210> 4035  
<211> 583  
<212> DNA  
<213> Glycine max

<400> 4035

agcttatctc aattttgtaa tcgaggcaaa agcttgactt gtttgaaatt ttgtagtttg 60  
cctatagctt gaatagcttc tttcccttta tcaaactctt tctcaaagta ttttaaaatt 120  
tagtaattta gtttttagta gacattttca tgttagaaga tacagcaaatt attttaagt 180  
aaagagagt aaagaatata tgaactaatt gtagtccttt gttctctaga cagaattaca 240  
atttactgag taatagcctg agtcacgtag cttgtgttta gatcctttat atgattgaat 300  
ttaagctaa gcttgagctt ggttttagta aaacaaacaa gtttgattat atttaacggg 360

ttgagcttga atagttgagg aatagctcaa cccatttacg ttcttttagga taccattctc 420  
 gtggttcaac ttacaagact atcaactgta tatgcaaaca ataattttac agattcttcc 480  
 aggattatctt aaggaaatta aggagcagaa cagatctgtg gcacattctt catataaata 540  
 ttatcaatgc cttgtccaaa ccaaattgaa attgatgggtt tac 583

<210> 4036  
 <211> 617  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4036

tcacagcaaa tgatagaatg tctatagttt tatcatttga caattttattg ttatttatatg 60  
 tcttattctt catatatata gactcttttt ttcatcttt ttcaactgtg aatttttaca 120  
 taattcataa attttatttg ataccttgca tagcattgca tttagcaaat acaattttaac 180  
 atgcttggtt tataagtatt gacacaaaaa aggcttatga aaataccttg tattgcatgt 240  
 tgctaggggt tattaaaaat atcaataat ttacatgtg tctgtgaaat cagacttatt 300  
 aatgatgcga taaattatgt aactatcatg tctctcgttg atgttgctaa aaaaattggt 360  
 tatgaagtat agggattaaa agtgcatttt gcaaaaagtt taaagatcga gaacataatt 420  
 aaccatttaa attattatca ataaaaaac cttaaantta aaatacaaac ataggtagat 480  
 gtaatttata ttatcaatta ttgataaaaa aaaatataat aatgtttatg tgaacaaaat 540  
 atttttttga ccaaaaaata aacgcagtgt ttttatattc aaaatcattt tacagttaaa 600  
 tattttaatgg ttataaa 617

<210> 4037  
 <211> 988  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4037

cacacggaac gagaatcgaa gcggctgtcc natcattcgt atctgaatga attaccatga 60  
 cgaacgagct ttttcnncc ccggaggggt ggacctggaa gaccccggtt ttgaaaacc 120  
 ccccgaggca gccaatgca aaaaaaggga gggagaaact ttttttaaac cccaataagc 180

agacacgggg ggggtgttta aagcccatcc ccccaaaagt gaaccacagg aagtaacaaa 240  
cagacgtaga ttcaagagaa acaaagaaat aaggagcgca gttaagctca gacagcagga 300  
gacagagtga gcaacaagaa gccccgttca tgcaacacca aaaaagcgcg aatagaagag 360  
cgcacgaaac aggcagaaag tagactgact cctaatacaa aaacgcgaat gatgacaata 420  
gacgaaatga cgctaataag aaaagaggac acatcgcgca gaccgagaca gacgaactgg 480  
cagcagagaa aaaaacgacg gagaagaacg tgtggaacta cgacacgcca cggaggcgat 540  
ccacataaat aaaaggtggg agtaaacaga cagggcataa ttggattgat cgggaaaaag 600  
gactcgcggg gagtatgac aatacgattg caccgaaacg ggcacgtagg caaacctaa 660  
gtcaactatc acttgacag agaacgaact acgaggcagt caatcgatta caccgcaacg 720  
gacggcatat gtagacagac acagcggatg gtataggaca gaaaactcga cagaaaataa 780  
aagctatagt atatggatgt gcatagactc ccgacaaaaga acgttatcag gagggcgaga 840  
ataacctacg acaaaagtga ttcaagaatc gattctacct ctaaaccgcc gccgaactaa 900  
caccgtacct gcgtatatca caaaattctc gacctccgca acgattacgt aatcctcacg 960  
catcgacgga tatagacacc ggaagacc 988

<210> 4038  
<211> 835  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4038

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atagcgcggg ttagggagag aaacgattta cttacaactt tatttaaatcg acttttagtag 120  
gggacaatgt agttgagcct tgcatcttgc ataattatga gactaaaata tccccagtgg 180  
agaatacctt tgcataatgc tttttttttt caactttata cacacatagt taaacaactt 240  
ataactgtgc ctaagctaaa aagcttcttc ttttgaacct agcaccaga tttaaggttc 300  
caattcaatt attcccgat cttttaaatt tagttaaggg aacttccctt tgttcttttt 360  
taaaacttgc cccttcctta actttgacct agatacaaag atgagtcccc cgaaagtacc 420  
catacctgtg actccctttt ttttgttcat tgtgcaatcc atgaaatgta atgagtacgt 480  
atggaagttt attgactttt cccccacct gaagaaattt tttccatttt ttcacatctt 540



<400> 4039

<210>	4040
<211>	515
<212>	DNA
<213>	Glycine max

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tgcaagaaaa	agggtctatt	aaagatgcac	aatgggtgtg	ggatcaaata	attgtgacctg	120
cagtataaac	ccattgaaga	agaacatgct	tgcattttga	tgatgacaat	tcacaatata	180
ttttgaagag	accaacaatg	acatcttata	tggcagtcaa	agactgtaaa	agatggcatt	240
ccatcggttt	taatggcatc	ccagattttg	gatcttgtgt	catttagttt	aatttgactc	300

taacattaac tagtttgta tttaacctgc tatgtttatt aactattaag aaatacatta 360  
gagccattac atgcaatcac tctttcataa aaaaaaatcc actttgttct ttgtctcatc 420  
cctattgggg cataataaat tcccaaant gtaaggtttt tggattatca gatttaaaaa 480  
atgcttaacc tgactattta agaataaaac tgtga 515

<210> 4041  
<211> 467  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4041

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agagatgcac agtcctatta tcgtccagga agtccataag ctgaatggaa gactagcatc 120  
cttgtgagac taaacctgcg aacaaccttt cttagccttc aagaagacca ttgtcacatt 180  
gccagtccta agtcaaccta ggccaggagt acccttactc ctatatctct cagtagttga 240  
tgaagcagtt agcccatccc ttttacaaga ggaagggaag caccagctcc ctatctactt 300  
caccagcagc atactctatg atgccgagat gcgctaccaa atgatagaaa aggtggcact 360  
aacactcatt acctcagccc agtgtctcag accctacctt taaagtcatt gagtggtagt 420  
caagacgcac tataccctat caaacagggt ntgccaaagc ctaaact 467

<210> 4042  
<211> 377  
<212> DNA  
<213> Glycine max

<400> 4042

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tactcatttt ttgtgtgtga gtttctggag aatggcgacg tcaaaaaaat ttttaaagat 120  
gatgaacaaa caattgcgtt tgattggaat aaaaggggtg atgttggtta aggtgtagca 180  
aatgctttat gctatatgca tcatgattgc tcacctcaa tcgttcatcg tgatatatca 240  
agcaagaatg ttcttttgga ttccgattat gtagctcatg tcttagactt cggaacagcc 300  
aaatttttta atccagattc atccaattgg acctccttg cagaaccttt gatatgctgc 360  
tcccggttaa tttcctt 377

<210> 4043  
 <211> 519  
 <212> DNA  
 <213> Glycine max

<400> 4043

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 aacttccagg gcacaaaatt ccacagcaac catagtgcct atttagggaa tagagcccta 120  
 gaagcagcaa agaggagcag cttgtgcatt gaagcctagg ttttgtcatt tgagagagat 180  
 tattgagtag aaagtgagtg tgagatgctg agaaaaggag gaggaggaat ccccttctt 240  
 gtgtaacgaa ctatcattct ctgcttttaa tctcatttat tgtaggggtt tctttgtaat 300  
 ggctggctaa acaccctagt tggggatttc taatgaacaa ctgatgtaaa tacataatat 360  
 ctaattcatt gtgttttctg tgttcaatgc atcattcaat gcttgatggt tggatgcttt 420  
 tggctctgtca cccatttgca tgcatagtta agtgacttta gcattgggaa atgtattggt 480  
 gccttaaaac ttgattgaaa aagattgaaa cttaattctt 519

<210> 4044  
 <211> 402  
 <212> DNA  
 <213> Glycine max

<400> 4044

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 cagactttta atctggcagc caatccaatc cttgtgtgcy gactctcagc cacttatgat 120  
 agccgccgat gctccatta ctgtttcccc taagctctct atcctttctt cacaccgcat 180  
 cacatgcctt gtgaactcct tagagtaccc tcgcattggg gtcactgaaa ccccggtgta 240  
 tgaaaggcgt gatgctttcg tctgatggca ctctctcat ggggtagcca agctgtctta 300  
 tggcgaggac gggattataa tgaatacaac cccttggtcc atcaaggga catttgga 360  
 tccttcgcat gaagatcgaa tcttgattct tcttctctc ta 402

<210> 4045  
 <211> 987  
 <212> DNA  
 <213> Glycine max

<223>        unsure at all n locations  
 <400>        4045

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 tttcgttaac tatcttacgt acatataata aaattctaca cccnnnnncna aagagagatg   120  
 ttgttgtagt ctctgtcccc gggcatcctt ttgatncgac ctgcgagcat gcaagcntga   180  
 aaagcatgaa gcccgtaaat aacttgtttg tttttataat atatacaaat ggcgtaacaa   240  
 agttttggat aagatgaacg catctcgtat atgatgagat cttagtecta gggcattgtg   300  
 aagagctata aattttaatt cttcttatcc ttattccatg ccttggacca atgattagct   360  
 catgaattag tatgaaagat tattctttcc ctaaagcttc ttacaaaaac ctcacccctt   420  
 actttgaaac atggctcttg aacaattgaa ttgaatccaa ttgccctcat ttggttaatc   480  
 gactgtccca agtcatatth catgaataga ggaagggttg tatagcttga aagtaattcg   540  
 atatacctca ctttgataaa tgaataccc aacctccaga aaacacaaga aaaggctctt   600  
 tggactgaat ctaaaatcga ttaccatata tgataatcct gtttcccagc cagcatagaa   660  
 cgaactaata ttttgatatt gaaatgaatt aatactcacc ccttgtgaaa tcgatgaatc   720  
 aggggtctgga atatcaaaac aaatggaatt tcgacaaata aattggatac ccattgtata   780  
 atcgataaac ttctttttta ctggtaaaac tactacatcc ccccatgcgt ttaaatttaa   840  
 aaacaacact gaatgtgccc aaaattttacc gacacacatt ttcatagaaa tttcttaaaa   900  
 acgaatagtc atctgcatta tgttggtaga attcgaactt gacacaataa tcgctttaat   960  
 tgggagacgc ggtgatttca gggaccc    987

<210>        4046  
 <211>        550  
 <212>        DNA  
 <213>        Glycine max

<400>        4046

tgccaaaaat aaagaatgaa aaatgggaga tttgaatcaa gtgagatgta ttaaggaata    60  
 aggatgaagt agggaaagtt ttggtcacaa atcaagatat aaaaaagaga tctaagagtt   120  
 attttaatat ttttataagc attttgatga tggactggga ttgactttgt aatagggag   180  
 gactattaat gtaggaggac aaacagaatt tggcttacca ccgtagaatt cagattggag   240

tggtaaaata ggtccttaag aggatgatgg atggatagtg gtgaaatgat tggctctagat 300  
 ggtattccta ttgaggtttg gaagtgtgta cgaatctcga gttaagaata ttttaagaat 360  
 cttggataag actactattg aggtttggaa gtgtgtagga atctcgagtt aagaatattt 420  
 taagaatctt ggataagact actattgttc ttgatgctca ttttaataat ataaataata 480  
 gagtatttta tactaaggaa tattcttcat aatttgttcc cttatttgat caagagttca 540  
 gtactaatat 550

<210> 4047  
 <211> 555  
 <212> DNA  
 <213> Glycine max

<400> 4047  
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 gcttcggttg ttcaatttcg agcgtctcga tatattatga ccccgatcg gacatctgtg 180  
 tgaaaacgta tgaccattcg attttctcga gagcttccgt tgatcaattt cgagcgtcta 240  
 gatgagttat gtccccgaat cgaacattcg agtgaaaact tatgaccatt cgaatttctc 300  
 gagagcttcc gttgttcaat ttcgagcgtc tcgatataat atgttcccga atcgggcatc 360  
 cgagtgaaaa gttatgacca ttcgaatttc tcgagagctt ccgctgttca atttcgagcg 420  
 tctcgatata ttatggcccc gaatcggaca tccgtgtgaa aacttatgac cattcgaatt 480  
 tctcgagagc ttccgttggt caatttcgag cgtgtagatg agttatgtcc tccaatggac 540  
 attgggtgaa aagtt 555

<210> 4048  
 <211> 612  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4048

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 caaaggaaga aagaaggttg tcttcgaacc cgagagattgg gtttgggtgc acatgagaaa 120  
 agaaaggttt ccggaacaga ggaaatcaaa gttcaacaa tggggagatg gaccatttca 180

agtgcttgaa agaatcaatg acaatgctta caaagttgag ctgcccgggtg agtataatgt 240  
 tagttccacc ttcaatgtct ttgatttacc tctttttgat gcagatgtag aatccgattt 300  
 gaggacaaat cctttctcaag agggagagaa tgatgaggac atgaccaaga gcaagggcaa 360  
 ggatccactt gaaggacttg gaggacctat gacaagggt agagcaagga aagccaagga 420  
 agctcttcaa caagtgtgt ccatactatt tgaatacaag cccaagtttc aaggagaaaa 480  
 gtccaaggtt gtgagttgta tcatggccca natggangan gactaaatga caccactttg 540  
 tctcaatttt tagagtgttt agtttgtcta aataatggcc caatccttgt aaagttgctg 600  
 accaaaaata tg 612

<210> 4049  
 <211> 530  
 <212> DNA  
 <213> Glycine max

<400> 4049  
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 acatgccgaa aaacaaaaga aaatattgat gcacaatccg taaaggttcc gtgacacacc 180  
 ggaaatcaaa tggaagcatc gttgcataat ttagtgaggt tccgtaacat tccgtaagtc 240  
 aaaaagggga tgattctgta atccgcaagg ttccgtaaac attacggaaa gaaaacaagt 300  
 atcgttacga aattcgtaag tttccgtaac tttacgaaaa agaatacacc aaaaaaaggt 360  
 agaggggggtg tacttagtaa aaatgggggt gcaataaca accaggccca cttggggcct 420  
 ccagaagatt cctccagaag gcttgtgctt ctggaggaag caaccctgct cgctggggcg 480  
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<210> 4050  
 <211> 362  
 <212> DNA  
 <213> Glycine max

<400> 4050  
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 gatttccacc atggagaagc agcggaagac aaaagaaaag aggggagagg aggcgccatc 120

cactaaggaa taagccatgg aagaaggagc ttcaccacca agatgagcct tggataaaaa 180  
gcttgtagag aagcttcaat ggatgaaaag aaagaaggag agaaagatag agggggggagg 240  
cacaaaattg aatgaagaaa acaagggaga gaagttgaac tttgagttgt gtctcacaag 300  
actctcaatt catcaaagat acaacaagtg ttacacatgc ttctatttat agactaggta 360  
gc 362

<210> 4051  
<211> 730  
<212> DNA  
<213> Glycine max

<400> 4051

agcttgaaaa acaaagtga gaaagtttta tctgcattaa ttgggtacat agaacaagcc 60  
acaagatact catttgagat ctcagacaga aaaccagaac tttctatgtc aaatcacatg 120  
gctcttggtg ttcttcatta tggttgtct ttttttggtg ccttttggtt caaagcacat 180  
ggcagtggtt tgaactagca agcgtaggac cattactaat aagttatcaa gcaatggacc 240  
ggataggatt attagaactt tcgacgagct cagagaatca aattctcatt attaagtgca 300  
aaagacaagg cattattaaa tgtatagaca aagtactcga ggggtgtacaa gataatttgg 360  
ccattatggt agatgaaaac aaatggacca cataaaaact agcattttca ggggtttctat 420  
ttaaaaaatt cccatcttat tcaatggacc ccgcggcatg tagtaatacg taacacggcc 480  
aaagtatcat caggtggtaa tttcttttta atttagtatt ttggggcaaa ttttaaatta 540  
atattcctat gggaataagg tgtagtagat gtttaatat aaaattatca aactattatg 600  
gaattttatt ttacttttta cgttggaaaa cgaaaaaaat tttatgaatt ttttaaataa 660  
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taaaaaaat 730

<210> 4052  
<211> 554  
<212> DNA  
<213> Glycine max

<400> 4052

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ggatcaactt gaaacttatg tgcttcaagt gagaagaaat gcttcttttt ccacttgtga 120  
 agatgttcaa agtttggcta tgaagatggt tcaaactgag aaacatttgg tatttccatt 180  
 ggtttataaa cttattgagc tagctttgat attgccggtg tcgacagcat ccgttgaaag 240  
 agctttttca gcaatgaaga ttatcaagtc taaattgcgc aataagatca acgatgtgtg 300  
 gttcaatgac ttgatggtat gttacaccga gcgggagata ttcaagtcac ttgatgatat 360  
 tgatattatt cgaacattta ccgcaaagaa gtctcggaaa ggacacttgc ctcgtaattt 420  
 tatttaaccc gctattgtaa gaatatgctt atctctttta ttttaaacta ttttttgggt 480  
 gacaaaatga cgagtctctt ttattttgat tgattactat ttacatatta tatacaaggt 540  
 gaatttgcta tctt 554

<210> 4053  
 <211> 715  
 <212> DNA  
 <213> Glycine max

<400> 4053  
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 agttaaagaa aaatttgagt aaatgaattt ctttacataa atattctcaa agtatcggtt 180  
 ctttggtgca ttgacaaaac ttctctatgc ctgtctgata ttgcacatgc agttggtaga 240  
 ttggaaagta attgagggat ttagtgatat aaaattgaag ttctgatttt gatgaaataa 300  
 aaatgagaag tggttatgtc ttgcttttag ctagttgtgc agtatcatga aaatctacta 360  
 gacaagttat tatttcacat gaaagcaaaa attattgctt taaatactgc tactagttag 420  
 gttgaatttc ttaaaaatgt attatgtgat ttgtcattgt taaataagcg tatacctcca 480  
 attccaatgc atttgatag tcaaattgct atatctaaag tgacaagaaa aattttaatg 540  
 aaaaaagaag acacttaaga gtgagacata agtctttaag aaattggatt tctcatgatg 600  
 tcatttcttt tgactttggc aggtcaaaaa ataattattac agatccgctt acacaaaggt 660  
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<210> 4054  
 <211> 615



$\lambda$	$\lambda^2$	$\lambda^3$	$\lambda^4$	$\lambda^5$	$\lambda^6$	$\lambda^7$	$\lambda^8$	$\lambda^9$	$\lambda^{10}$	$\lambda^{11}$	$\lambda^{12}$
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1	1	1	1	1	1	1	1	1	1	1	1
2	4	8	16	32	64	128	256	512	1024	2048	4096
3	9	27	81	243	729	2187	6561	19683	59049	177147	531441
4	16	64	256	1024	4096	16384	65536	262144	1048576	4194304	16777216
5	25	125	625	3125	15625	78125	390625	1953125	9765625	48828125	244140625
6	36	216	1296	7776	46656	279936	1679616	10077696	60466176	362793696	2176782336
7	49	343	2401	16807	117649	823543	5781343	40353607	282475249	1977063263	13835036817
8	64	512	4096	32768	262144	2097152	16777216	134217728	1073741824	8589934592	68719476736
9	81	729	6561	59049	531441	4782969	43046721	387420497	3486804483	31381279297	282429536481
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[illegible][illegible][illegible]

$\lambda$	$\lambda^2$	$\lambda^3$	$\lambda^4$	$\lambda^5$	$\lambda^6$	$\lambda^7$	$\lambda^8$	$\lambda^9$	$\lambda^{10}$	$\lambda^{11}$	$\lambda^{12}$
0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1
2	4	8	16	32	64	128	256	512	1024	2048	4096
3	9	27	81	243	729	2187	6561	19683	59049	177147	531441
4	16	64	256	1024	4096	16384	65536	262144	1048576	4194304	16777216
5	25	125	625	3125	15625	78125	390625	1953125	9765625	48828125	244140625
6	36	216	1296	7776	46656	279936	1679616	10077696	60466176	362793696	2176782336
7	49	343	2401	16807	117649	823543	5781343	40353607	282475249	1977063163	13835036881
8	64	512	4096	32768	262144	2097152	16777216	134217728	1073743872	8589934592	68719476736
9	81	729	6561	59049	531441	4782969	43046721	387420497	3486804497	31381279483	282429536481
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$\lambda$	$\lambda^2$	$\lambda^3$	$\lambda^4$	$\lambda^5$	$\lambda^6$	$\lambda^7$	$\lambda^8$	$\lambda^9$	$\lambda^{10}$	$\lambda^{11}$	$\lambda^{12}$
0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1
2	4	8	16	32	64	128	256	512	1024	2048	4096
3	9	27	81	243	729	2187	6561	19683	59049	177147	531441
4	16	64	256	1024	4096	16384	65536	262144	1048576	4194304	16777216
5	25	125	625	3125	15625	78125	390625	1953125	9765625	48828125	244140625
6	36	216	1296	7776	46656	279936	1679616	10077696	60466176	362793696	2176782336
7	49	343	2401	16807	117649	823543	5781343	40353607	282475249	1977063163	13835036881
8	64	512	4096	32768	262144	2097152	16777216	134217728	1073741824	8589934592	68719476736
9	81	729	6561	59049	531441	4782969	43046721	387420497	3486804497	31381279483	282429536481
10	100	1000	10000	100000	1000000	10000000	100000000	1000000000	10000000000	100000000000	1000000000000



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 atgccatgac tcatgcgtta tgtgaagctg gaacatcatt accgagaaat ggaagacaca 360  
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<210> 4058  
 <211> 310  
 <212> DNA  
 <213> Glycine max

<400> 4058

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 aaggtcttag agaccatata aggttcttac cgatttctaa ttatgtgggc cattaagtct 120  
 atcatatgct gacaatagcc gagaagtcg tggatctctt cgggggcgga gtaagtgtct 180  
 gccatgcct tggccttggc taacaatcgg ggaagttctt gactcccaat cctggaaaca 240  
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 gcctattttt 310

<210> 4059  
 <211> 598  
 <212> DNA  
 <213> Glycine max

<400> 4059

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 aagccgaggc gcttctgaaa cgttttcgta acgtttccgt gaggaatttc gcgaagggtt 180  
 cgaccgttct tcgacgttct tcattcggtc ttcaccttc ttcgatcttc aacgggtaaa 240  
 tacctcgaac caagcttttc gattcattct atgtaccgt ggtgggtccac attgtgtttc 300  
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 tttatttaag tcatttctcg cttaacctaa aaataatata aatttccacc gatcggttga 420  
 attgtattat ccggttaactt cggttaaaat gaattccgac cggtcggtcg tgccgtaacc 480  
 acgttggaaa tcaaaaaaga ggtacaataa tattctcata ataaaaaaag acgtctttta 540  
 ataaaaataa gcggaaaatc attcggtcgt tttcttttgg gatttctcat tcttaatt 598

<210> 4060  
 <211> 630  
 <212> DNA  
 <213> Glycine max

<400> 4060

tgccacccag ctcgccagg cgagctcagc tagcccaagc gagcagggtt gcttcctcca 60  
 gaagtaacag ccttctggaa ggcccaagtg ggcttgggtg ctatttgac cccattttt 120  
 actaagtaca cccattgcc ttttttttg tgattctttt ttcgtaaagt tacggaaact 180  
 tatgaatttc gtaacgatac ttgttttctt tccgtaatgt tacggaacct tgcggattac 240  
 ataatcatcc cctttttgac ttacggaatg ttacggaacc tctaataca tccccttttt 300  
 tgatttccgg tgtgtcacgg aaccttacgg attgtgcac aatattttct tttgttttcc 360  
 ggcattgtccc ggaatttcac aaattgccta atgatgggtg ccaagcacct cacaaggacc 420  
 aaacaaaagt tgcattgcat caagcaaagg tccccggacg aaactaaggc atgacagcgt 480  
 gtaaatcctg acattgacaa aaactgccac acatggggca attttgaaag ctgtttaga 540  
 tatctctaag gactcatcac gattttcaag tttgtaccat tattgtaaac cacagttaca 600  
 atgttaaagt aaatggataa agttgatatc 630

<210> 4061  
 <211> 359  
 <212> DNA  
 <213> Glycine max

<400> 4061

tgcattgctt ctcacgttat ataggagtc gacagttcta tcttttcagc cttcttacca 60  
 tgtaataacg gatcattttt taagggtccat tcgggtcata agtgatcact ttttaagtta 120  
 acagaacccc cagattcatc tcttaagatt gaactacgta ggtctgattt cctctgcaaa 180  
 ggaggactct tacgatacat gagccccgct tttgtcgacc tccaaaataa gaataaatcc 240  
 aagggtactgc ccacaattt ggacaatatc ttgctttgaa gctgctgttc tttgaaacaa 300  
 agatgagatg ctctaattcc ttactcagtc gaaagtacaa ctccctacct gctaatttt 359

<210> 4062  
 <211> 558





<210> 4065  
 <211> 463  
 <212> DNA  
 <213> Glycine max

<400> 4065

agcttatcct gccatTTTTat tcattcacgc tattctgcat cattcttcct ttgaccatgt 60  
 tccttcctga agccgagctc ccagcctggg ttgtttgtta cattcctgga atcatgtccc 120  
 tcctaagtgt tctcccagct ccacggtcac ttccatttat agttccttac cttctatttg 180  
 agaacactat gtcggtaact aaatttaatg ccatgatata tggattatta cgcttttgaa 240  
 gttcttacga gtgggtggtt acaaaaaagt tgggaaggct atcagagaca gatttggttg 300  
 cctttgagaa agaagctgaa cctctaatac gatctactag tcttcataga tcacctcag 360  
 attcaggcat tgaggaacta agcaaactag aattgtcaaa gaaaactggg aagaccaata 420  
 aaaatcgtct tttcaagaaa gaactttatc tcgcattaat ttt 463

<210> 4066  
 <211> 586  
 <212> DNA  
 <213> Glycine max

<400> 4066

tcattgactag ggcttccaac aggatggcct ttaaaatttc aattgattct tttgcgtatg 60  
 cccttggggc agcgtgcca ctgcttattg caatcttttt ctccgggttt tttgctggtt 120  
 ataaagtctc ttctcttata accatgggtg gtgcttggtg acacacaaaa gaaagaaaat 180  
 taggatcaat ctatgtttta ttttaatactc attgtacttt gattaattac ctaattaaac 240  
 caggattatg catcctcgag gatggctatt ttacctaagc tagctaagtt gttctggcct 300  
 tggccctcct tgtggatcta ataattttta gcttgaatat tgtacttacc aaaatccgaa 360  
 gctagcacac ataaggggtga acgtggctaa ggtggacttc tgaacttcgc acatcgacta 420  
 agagtgcact ttgttaggag gacaaaaggg ggacctgcaa aattaaggac ttcaacgctc 480  
 aagtaaattt atgagttatg aaaataatag agtatgagta cacgagtatg aaaatgggtg 540  
 tgcattgtgtg ttagaaatgt gttaagggtt caaaggaact tgttac 586

<210> 4067

<211> 630  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4067

agcttttctcc actaagttgc ctgatgcttg aaatgtattt tctgatggca gtggtcctag 60  
 atgcagggaa gaattttctcc aagaacaccc tcttaaggte atcctagctg gtaatggacc 120  
 tgggagcaag gtagtacaac caatcttttg tcaactccctc cagagaatga ggaaaagcct 180  
 ttagaaagat atgatcttcc tggacatcag ggggcttcat ggtggaacag acaatatgga 240  
 actctttaag attcttatga ggatcttcac ttgcaagacc atgaaacttg ggcagcaaat 300  
 gtattagtcc agtcttgaga acatatggaa catcgtcac aggatattga atgcacaagc 360  
 tttcataagt gaagtcagct gcaaccatct ccctaagagt cctctcacga ggtggagatt 420  
 gagccatgtt cttagtatga aaattagcag ccgaatgctc aaaatcagaa tgttcagacc 480  
 aacaacagaa tgctcaaaat gcacagaatg attaggatgc acagaatgat aaggatgccc 540  
 agaatgatca ngatgcacac tatgccttac taatatatga aagggttctat cttattcagg 600  
 gatcaagggg tgtaaatacac ctggattggc 630

<210> 4068  
 <211> 501  
 <212> DNA  
 <213> Glycine max

<400> 4068

acactatcta gatctcaagc ttacaacata aactaccctc attctttgat tcatttaata 60  
 taggggaact tattccaagg attaccaaat gaggaccctt atgaacattt ggcaacattc 120  
 attgaaatct gtaacactgt aaagattgca ggtgtgccat atgaagccat tatactcaat 180  
 ctatattcaà tttccttagt aggagaagcc aaaagggtggc tacactcatt taagggtgac 240  
 aatctgaaaa cctgtgaaga agttgttgaa aagtttctga agaaatattt cctatagtca 300  
 aagactgtga aaggggaaagc tacaatctct tcatctcacc agttgcctga cgagtccttg 360  
 agttaagcgt tggaaagggt tacaggtcta ttgagaaaga ctcccaccca tgggttcttt 420  
 gagccaatta agttgaatat gtttatggac tggctgagac cacagaccaa gcaactacta 480  
 tatgcttcat aagggggaaa a 501



<210> 4069  
 <211> 511  
 <212> DNA  
 <213> Glycine max

<400> 4069

agcttgtaat tgattaaacc gatacgagag atttctctgt aagctagaaa catttatgta 60  
 atcgattacg atcaatctgt aatcaattaa aatagaaagt cttaacttca aaaaaaatct 120  
 tctaacttta taaactattc ctcttactcc tacaagatga tgcattgatgc acatatgaaa 180  
 taatagagac taagatggaa cacacaatat aacctcaat acaaagcca ctcaagagag 240  
 ttgggcatgt aaaagacaaa aaattttcaa gctcttcttc aagattcaag gctaggtctt 300  
 tatgattctc cccctatcta taacaatctc ccccttttgg ctttgatgac gccaaacttg 360  
 aattttccat ttgagtacat ttggagagtc ttaagagtaa agacttttct tagtcaaacc 420  
 taaaactttc ttaacattaa gagaagtacc aattcatatc atcatcatta agtagagctt 480  
 tatatgaatg tatgatgcca tggggtacaa a 511

<210> 4070  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<400> 4070

tatcgttatg gcttgctcc ggacttcacc cccgtgcca cccggaaga ttaagccaa 60  
 gccctactt tcgaggggca gctccacct tatgaagact atccgggca agacgatggg 120  
 gaaggagata cccatcttgg cccctgctc cacctcaaag atccatcccc gcatgaacta 180  
 cccagccga acatagtccg ccatacccc gctcaccca caccgtaaa agaatttggt 240  
 ccttcgtgg aagataaggg aaagattgag gcgcttgaag agaggttaag agcagtccag 300  
 ggccttgga attaccatt ctggatttg gcggatttat gtctcgtgcc caagatcgtc 360  
 atccctcca aattcaaagt accggacttt gataagtaca aaggtagac atgtccgaag 420  
 gggcatcttt ggatgtaatg c 441

<210> 4071  
 <211> 586

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4071

agcttatcag gtaggcccac ctgctattac taatataaga ggcccatgat ttaggaagag 60  
 ggcaagaata cagagggcaa gaaagatcgt ttttagagaa gaaaaatgag tttggcggcg 120  
 tctaagctca aggactgcat tttgttttct tcttcatcaa atcctttgat tcccatagct 180  
 atgagtaact aattccatgt ctgttgggtt tgggtgaatt agactacctt catctaattc 240  
 ctgctttttt tattcaataa agcaattgtt attgttcttc ttttgtgcct attgcctttg 300  
 attgatcacc taattacttg attcattgtg ttcaattgta tttggaaaaa tctatttgaa 360  
 ctgtgaattg aagaagacaa tgaataattt ttatgcctag ggatagtgtg acaaggattg 420  
 ttcatcgta aaacccttat ccttaatgca agtcgtttgg ctacactttt caaggattgg 480  
 tattgaagtc aaaggactta agttctctcg cctaaagaat taaagttagg ataaattgtg 540  
 tattggtnat aacgtaatct caattgaata aagattattg gtaatg 586

<210> 4072  
 <211> 634  
 <212> DNA  
 <213> Glycine max  
 <400> 4072

tgaaggtaaa ctagatgcct tggtaacct ggtaacccaa ctggccatga ataaaaaatc 60  
 tgcacttggt gccagactct gtggtttatg ctctatgct gaccaccaca cagacctttg 120  
 cccttctatg caacaatcta aagtaattga acagcctgaa gcttatgctg caaacatcta 180  
 caatagacct cctcaacctc agtagcaaaa tcagccacaa cagaacaatt atgacctctc 240  
 cagcaacaag tgcaatcctg ggtggaggaa tcatcccaac cttagatggg cgagtccttc 300  
 acaacaacat caacaataag attagcctta ttttcaaaat gctgctggcc caagcagacc 360  
 atacgttctt ccaccaatcc ggcagcaaca acaacaacag cccagaaaac aacaaacaat 420  
 tgaggctcct ccgcaacctt cccttgaaga acttgtgagg caaatgacta tgcaaaacat 480  
 ccagtttcaa caagagacca gagcctccat tcagagctta actaatcaga tgggacaatt 540  
 ggctacacag ttaaataaac aacaatccca gaattctgac agattacctt cttaattctgt 600

ccagactccc aaaaatgtga gtgccattac attg

634

<210> 4073  
<211> 540  
<212> DNA  
<213> Glycine max

<400> 4073

agcttgggag ttctgagtc atgagggtac tcagaagcta aagggaatca ctaatagggt 60  
ctatttccgc tgaatcttct gtctttgatt tttttttttt cttttcaatg gggtagagag 120  
ggttttctct ctcaaaatcc aattttatct cttcacaaga gataaatttt tctatgatga 180  
attgtcta attagagct atactaataa agaaattaga aacaaattga gcaatgaatt 240  
tctaaatagg gcaaaagtta tggataagga atttatttct ctggatatat tagaaaacca 300  
aattcgattg tcta atgatg aaactaaaac aaatatttaa ctaaaatatc tctcaatttg 360  
gatattgaac agagagaaag agtggaagca ttttggtgcc tgttggaag atgataccca 420  
caa atattct gatgcaagta gaataaaca tgtgaagcat tttctggagg tttaaactgg 480  
ccgaaaattc ttaaaaccct tttaaaacac ttttagccaa gcatttttta gcgggttttt 540

<210> 4074  
<211> 380  
<212> DNA  
<213> Glycine max

<400> 4074

taaggagacg ctgactcaat ttatgtagat atccatgtcc aaatacagga gcacaaagtc 60  
atccatcaag aacttgagaga tacaagtaag acacttagcc aaacaaatgg ttgagaagcc 120  
cactagttgc tttggagcta acatatagaa gaacccgaag gaggaatgca aggcgatgtt 180  
gactagaagc caaaggagag cacaaggtga agaagagaaa gctgaaggaa accagtctga 240  
ggatagaaag agcagactat gaaagagaga aagagaaaga agagaagaag agtagaacgt 300  
cttaaccttt aagaccaaaa gccagctagc tcgagaggta agaaagaaga gccactagtc 360  
cctctaaaag agctctcata 380

<210> 4075  
<211> 791  
<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4075

agacgaggtt gaancctgag gccctcgcag aggcttcata atatgggaca gacaacccag 60  
cgggattgac attaatcat taaaatgatg gtttttgttt ttttaagatc acaaactaac 120  
ggggcggagg ggggattttt atttgaatta gacttccttc cattgaccat aaaattaata 180  
aatattagtc aatattggaa tactgcctta ggtcattaat taattgaact caaaatacct 240  
taaattatat tcaattacac cgtaaattatt gataaaacct aaaaaaaaat catttaatat 300  
ctgagcaaat gtaaaatcca ttgcttcaat ttttgattta tcacatgcaa ttcaacatac 360  
atctcttaat aagaaccctg caactcaca aaaatctaaa aaatcgcttg ctgaataatt 420  
cattgaacac caacactact ctttagctac acggtaaaac attcactgac aaattaaatg 480  
tacgccccaa attataatag aagaaacact aaaatttctt aaaaacacat ttaataatct 540  
cgaataactt ctaattcgct cccaatatca gatactcaca aacattattt atacaaaaac 600  
actcttacca accatgcttc cgaaaattta tactccttac caattggtag cactcaatat 660  
cttaacttac aaaaaattaa acctcatatc caataggcta actaccattt ataaacacta 720  
ctaagtaata gtctatcatt ttatatataa ggaagcaatc cctcttacac ataaactgta 780  
caaccgtata a 791

<210> 4076

<211> 419

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4076

agctttntgt aagaatggag gagaggaaga aaatacaata gcaccaagtt ttgcccaatg 60  
aacttttctt gacaaagcaa gtgttgaaca aaaactctta gaaagatggt gagaattaag 120  
catctttaa ttcgtgtcat ggtcacatat ttatagccat ttgatggctc ttgaggaatc 180  
atgttaaaag ttgtgactct tggcaaaagc taatcacttt aaaagttgtg actctctggc 240  
aaaaactaat cactttaaaa gttgtgactc ttgacaaaaa ctaatcacat acaaaagaat 300  
tctaaggcgg ttagtccttt gaatgctttt gtataaggga aagggaagaa tcaaaagaat 360

tctcagactg tgccgtcttg aattctttga caagggagaa gggagacaca aaagaattc 419

<210> 4077

<211> 458

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4077

atatatttga gggactcatg gtcactatga atgacaaatt ccttgggata aaggttaagt 60

tgccatgttt tcaaagcccg tactaaggca tacaactcct tatcataagt tgaatangta 120

agggtaggac cacttaactt ttcactaaaa taagcaattg gatggtcttc ttgcatcaac 180

acagccccaa tcccaacatt tgaagcatca cactcgattt caaaagattt ttgaaagttt 240

ggcaacgcaa gtatgnggc attaattagc tnttgcttaa taacattgaa agcttcttct 300

tgtttctctc cccatttgaa accaactttt ttcttgagca cttcattgag aggtgctgcc 360

aatgtgctaa aatccttcac aaatcgtcta taanaactnt ctaagccatg agaactcctc 420

acctcggcca cggacttatg tgtaggctat tcttgaat 458

<210> 4078

<211> 497

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4078

atctctaagt cacctgaggc atgcaagctt gtacacaata ccatattgaa agatgaaaaa 60

tctaagactc agaatggttt ctgctatcct tgaacccaag ctctgatat gagcctgtcg 120

atggaataat ttatgaatat tgagacacgg atatttgaat acagtcaaac aatgatgaaa 180

ccaaatgtgt ccatacatcc aagatccaac aaaacattat catctctact acattgagtt 240

ctaaaaaagt gtccaattat tagagtatgt tgtcagtcac ctgtaaaaac agttctgtaa 300

actaattgta agggctgtta gcttttgcta acagcaccta tcttagagtt agtttagagtt 360

ggttagggtc tgttagttag ttagttacaa tctgttacia taacagaaca gaggtctata 420

tatacctctt ttgtaacctt ctgtaattaa ctntgataat caataaaatc agcctttctg 480

tcaacgattt tctcttc 497

<210> 4079  
 <211> 473  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4079

tccctgatat attgagaaca tattggataa ctacaactnt gtagtaaaac accttctatt 60  
 atttgaagcc acaaagttca gcagaaccac aatgaacacc aggaaatatt aattgattta 120  
 atacaaattc atctgcttgc gggagatcat tctatcagag cgaatcacia gccgatgaaa 180  
 atgctaataa caattgggtg ggatcagata taaaataata caatgggttct tcaacaataa 240  
 atcaagttct catcacatct tactttggca atccctctc gagaagtcac ttcaacaaaag 300  
 aggcgatgca aatctagttc tcttctcca acaatgggaa tcttgcaaca aaatttcaaa 360  
 tgccacacia gtaactaana aggagttggg gggacatgct nttatgttac aaagttatgc 420  
 aattaaagg cattaataat taggaggaga caatagttcc aaaaactaca aaa 473

<210> 4080  
 <211> 470  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4080

agcttgtecn ncaattttct ataaacaggg ggagaagtga agtaganaac ggttcagccc 60  
 cttaggcact tctctctctt tcgaanttgc ttaggaaaat tgttcttggtg aagaaaatcc 120  
 aagccgaggc gtttccgtaa cgtttccgtg agtgatttcg cgaaggtttt cgaccgttct 180  
 tcgacgttct tcatcgttct tcagtcttca acgggtaagt acctcanacc aagcttttca 240  
 attcattcta tgtaccgtg gtggtccaaa tttggtttca tgtattttta gtctcgtttt 300  
 catttacttt ttatacccc ttttgacgtg cttaagccat ttatttaagt catttctcgc 360  
 ttaacctaaa aataaaaataa atttccaccg atcatttgaa ttgtatcatc cgtaaacttt 420  
 gngtgaaata aattccgacc gatcggtcgt gccgcaacca cattggaaat 470

<210> 4081  
 <211> 479  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4081

ctataattct cagcttggtc tctatagatc ttacacagca gaatctctca naactctctg 60  
gaacttgagc cttctctctc tagaaaccct agacacgcan agctctgaat ccaggtccaa 120  
actccccctc tgaaatctga tttcaggctt aaataggtgg ccttgtttgt gctcgtgagc 180  
ttaacacact tatggaccgc ttagtgacac ttagtgaatt tcggcttagc gtgttccttt 240  
ctcgttagc aaatgaactg aagcgggtgca cttagcgaac ctgtacatct tatcttcttc 300  
cagagtcttc ctcgcgtta gcccatgagt gttgcgtta gcggaggctc gctaagccag 360  
cagattggct tagcgagaag gtgaanaata gcactttcca aagcttgctt aattaacctg 420  
aaattgagag aacatgataa ttaaacaaac aaaaaggaag tactaagtat ttattacct 479

<210> 4082

<211> 454

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4082

agcttcttat ccaaggctca tcttggtggt gaagctcctt ctttcatggc ttattcccta 60  
gtggatggcg cgcctctta cctcttctcc tttgtcttcc gctgcatctc catgggtggaa 120  
aatcaccatt aaaggacctc attgaagctc aaagatccag ctccataga agctccacaa 180  
gcaagtttcc atcaggaatg atgcaatcct accccgcaag ggcattggat agaagactcc 240  
aagtagattg ggctagagat gcaagagaag gccctagggc tctcatgagc cttaggatag 300  
atttcgggccc catgggctaa gtatgagccc acttatcttt gtacatatta gattaagggtt 360  
tcattaattn tgggtctttt atttaaggct ccataatgta ggaaggggtac cctagaaata 420  
taggaatttt cagcccttgt attttagggc acct 454

<210> 4083

<211> 459

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4083

tgaacgaatg taagacacat cttcttcaac tntggtgatt cttgactcca tctcattgaa 60  
 ggcgatatcc acttgtaatt ccaaagtgtc aaacctttca ccaacaaagg tttgaagaca 120  
 atcaaacctg tccaaaatct ttgaaagaag agatgaatct tctccatcat gtccttcacc 180  
 aacatgtcga gcaccctttt tcacccaaga gccatcatgc tctttttgat aaccaaagga 240  
 tgctatgact gaagcgccta taaggaagga tcttttgatt ggaacatagg gttcagaatc 300  
 aagaggaatg ttaaagtgtt gaaagaaaag ggtgactaaa tgtggatatg gcaatggagc 360  
 attcaatcgc aatgccttat gcatgcgata tctaacaaga cgtgccaat caatttgtag 420  
 gcctttatga aaagcccaca taataatgag atcttcttc 459

<210> 4084  
 <211> 416  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4084

agctnganag aacatttcct aagaaagtat tttccaatag gtgctagaca tgcaaaggag 60  
 atggagtttc tacgactaat tcaggagaac atgactatga acgagtactc atccaaattc 120  
 gaatacttgt ctgatttttg cacctagact acttcaaaag aatggagatg ttgaaattat 180  
 gaagaaggag aaagaattga gatacagaaa acaatcatcc cggtgactat tanagagttc 240  
 ccaaagctag ttgaaaggat caagacagtt gagtgtcttg agtatggtaa tagagttgtt 300  
 aggactcgtg aagcttgacc atgtggatta aggaaaagat tccagtagaa aaaacgtgca 360  
 gtaggccccca agaccagcaa aagacaagat ctttaattat cagtagtatg cacaca 416

<210> 4085  
 <211> 472  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4085

tataagaaca nnaatgcctc aatcatttcc aaatatacat gtgaattang aagcatcgac 60  
 aagaatcaag ccaagactat ggtgcaagca atcaatgggg caaaacacac caaatgatta 120  
 tgatgatgga tggctcaaat tctcaciaag gtaaactcat cactttcaaa ttgagctttc 180



aaaactatca tgacatgtag aggagaatca aggatttcaa gtcacaagat atcaagaaat 240  
 tntatttttca aaacaattac ccattttcttg aacatatcct ataattcaaa gaaaaacatg 300  
 caaagtcgta catgcacaca aaattgaccc aaaatattaa actaaaaatc cgacgaaact 360  
 aacaaattaa caaattaaca caactaaca attaacaaaa ccaacaaaac tagcaaaacc 420  
 aaagaacact cccccccata cttaaacaac acattgtcct caatgtagca ca 472

<210> 4086  
 <211> 345  
 <212> DNA  
 <213> Glycine max

<400> 4086

actttgaagc tatttaataa tgtttaatta tttaacaagcc tttgttcatg ggtggacaat 60  
 ccttacaat aattacctga ttcccttcta gttatttgaa gttagaatga aattttactc 120  
 tgtagtttaa gcttaagttt aagttagtag atgaaacaag ccaatatact tgtttattct 180  
 aaactactat cgttatgatg aattatttta attctgtcat gtaggtatat catgaattca 240  
 attattacag tgttgatatt caacggaaga gtatatgaag acaatgatgg tgtaatatct 300  
 gaaggcagta aaaatgcgat tcacaataaa cgcgaaatta gtttc 345

<210> 4087  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4087

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 ttgtcttact caaagaaaag ttttattggc cccatatgaa gaaagatgtc cataagcatt 180  
 gcactacgtg tgtggcttgt ttacaagcca agtctagggt gatatctcat gggctataca 240  
 caccettacc catcccatct gcaccttgng tagacattaa tatggacttt gtncttgggc 300  
 tttctagaac ccaaagaggt gtagactcta tctttgtggg ggtggatagg tgtagcaaga 360  
 tggcacactn tataccatgc tacaacgtgg atgatg 396

<210> 4088  
 <211> 245  
 <212> DNA  
 <213> Glycine max

<400> 4088

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 cagtcaacag ataaaaggaa aacaagacca caaagcaagg aggcttgtgg tggctggcca 120  
 gcttgtgaat ttgtataata tgtggattgt ggcctctggt aatcgattac taagggtggg 180  
 taatcgatta caaggctaaa aattgaagac aggaggctaa gatggtctct ggtaatcgat 240  
 tacca 245

<210> 4089  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4089

agctagtacc atanattaca accatgcctg tcattgtctt gatttaggag caataacaga 60  
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 tttctatttt ttgtttctca ttnttttaag ttttttctg ttgtagtagt tactttttat 180  
 tgattcttgg atatcatgat gatgcttgt ataaacttgc tactatcagg tatgtctatg 240  
 cctaccatgg aacaaaggga ggaattgtat gatcccttgg caatggcctg gtggaccaag 300  
 cccgcttatt aattattata actcgatgc aatgtttttt ttattagaaa tcaactatcta 360  
 ttgactggt tgtagtgtag gtgcttaaat tgaaacaatg gtgtgttatg tataaaaaaa 420  
 atggattata catatt 436

<210> 4090  
 <211> 455  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4090

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tgaaagaatg gatatgcgtg ttgttgaaga agaaggagat tgggaatata ctgtgtgtgt 120  
 tgtgaatgtg aagtgaaggg gatggaacat gaggctcgga acttggttgt gaaaatttga 180  
 gggatggatc ttcttagtgc ctcaatagat tttttatfff ttctagccac gaggggatat 240  
 ggatgaaatg aatttttttt ttttttactt ttacatacac tatgacaaac aattgtaggt 300  
 ataagtatff tttgactfff acctacacta atttatgtgt gtaggcaaaa gtctccgtaa 360  
 gtatatgtca ttnttcttgt agtgagggag ctatgggacc agcaaaacct gcagataggc 420  
 cagatcatga gggatgatg cccctatatc tgatg 455

<210> 4091  
 <211> 418  
 <212> DNA  
 <213> Glycine max

<400> 4091  
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 gggggagtat gaaatgagtg aatgtaacat tatatcttgc atatactctg cttgtatctt 120  
 gatttcagga attaaattgt catcataaaa aagggggaga ttgtagaaca agcaaagact 180  
 ttgactttga tgttatgatg atgccatatg atcatgaggg tttgatatct tatgaaaatg 240  
 cacttctcaa gtttaattca agacaaaaat ccaagaatac aacatacaac atcaagaaga 300  
 tctctagtga tttaggaagg gaattccaaa ttgaaacaac aaaatgtttg gccaaagaaat 360  
 ttaagctaaa atgtcttttc aagttattac tctctgcaat cgataccaaa ggatgtat 418

<210> 4092  
 <211> 458  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4092

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 agctatcact ggccaatcaa tcatccgac tctaacttat aaagaagatt cataattgat 120  
 aaaaatgttg tactttaaat ggtagaagaa ttttaagttat aacttgccaa taagttaact 180  
 gatctccaac gtataaagaa gattcatgat tgataaaaac actctaagtt atttagttgt 240  
 ttaattttct gctagaagtt attgtgtcat tcatgtctat ctcaaccatg tactcttgta 300

tatggcgggtt tatttatatc gatcatgtca tttgtgtcga tttcatccat gaactattgg 360  
 tgtcatggcg gtttatttgt gccaatcgtg tcaattctgc tagagttttc ccgatgatgat 420  
 catgatcgtg atcattcctt acttcgtttc ttattcgg 458

<210> 4093  
 <211> 397  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4093

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 atgcatcaaa atgctcgaaa ttgaaaacag aagctcgggtg caaattcaaa cgacaattag 120  
 tttttactcg gatgtccgat tgagtcctt catatatcga gacgctcgaa attgaaaacg 180  
 gaagcttgta ctatattcaa acgacaatca tnttttactc ggatgtccga tggagtcccg 240  
 taatatatcg agacgctcga aattgcaaac agaagctctg agcaaattca aacgacaata 300  
 actttttttt cgaatgtccg atggagtccc gtaatatatc gagacgctcg taatggaaaa 360  
 cagaggctct gacataattc tacaacaata catttta 397

<210> 4094  
 <211> 428  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4094

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 atccgattta ggctcatcac atatagagac gctcaaaatt gaacaacgga agctctcgag 120  
 aaattcaaatt ggtcataact ttttaactcg aggtccgatt caggcgcata atatatcgag 180  
 acgctcgaaa ttgaacaacg gaagctctcg agaaattcaa atggacataa cttttaactc 240  
 ggatgtccga ttcaggcgca tcatatatag agacgctcga aattgaacaa cggaagctct 300  
 cgagaaattc aaatggacat aacttttaac tcggagggtcc gattcaggcg cataatatat 360  
 cgagacgctc gaaattgaac aacggaagct ctcgagaaat tcaaattggac ataacttnta 420  
 actcggat 428

<210> 4095  
 <211> 298  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4095

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 catggagatg cagcagaaga taaaggaaaa gaggtaagag caggcgccat ccactacgga 120  
 ataagccatg gaagaaggag cttcaccacc aagagagtgc cttggataag aggcttatag 180  
 agaaagcttc aatggaggaa aataaagaga gagagaggaa aagagggaga aaaagtgaac 240  
 ttcgaagtat gtctcacaag actctcattc atcanagtta caacaagcat tacacatg 298

<210> 4096  
 <211> 446  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4096

ntaggatatg taatttatat tntatagttc aagacaagca aaatgaaaca ataactcaac 60  
 tactgtgacc actccaacat aactattgcc actgaacaag ttacttcatg tttagaattc 120  
 tgcattttat ataatcaaca tatgaaagat ggagaaaata ttgtaatttc atgacattaa 180  
 cccacttgt ggtgattgat gtangtggtg attgagttat ttattggatt cttgcttcca 240  
 tttgggaccg tgttgctcat catcacaggt acaaagtgtt gttaccgatt aattntttta 300  
 ttacttgttc actgccatta aagacaacta atatttgata taaaaattnt gttcatgatg 360  
 agagaacctt agattcccgt ttgagactga atgcaatgat tcttgacagac agtttgcatt 420  
 aatcaatgta ttcaatcttg aattgg 446

<210> 4097  
 <211> 303  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4097

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 tcctggtaat ttgagaatca cttgaaatta gtgaaacaaa ttgtttccgt gaagaacatc 120  
 caagccgagg cgcttctgta acgtttccgc gggatgatctc gcgaagattt tcaaccgttc 180  
 ttcgacgttc ttcgttcggt cttcgtcgtt cttcggactt caaccgataa gttcccgaaa 240  
 tcgaactttt caattcattc tatgtacgct tagttgtcct catttgtctt caccgcgctt 300  
 tat 303

<210> 4098  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<400> 4098

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 atagtttggc aattgccagc taaaaaatac acgctcacac aaattgaaac atctaccccc 120  
 tcccacatac caaccagtt atgttaatca taattaactt taattatgat gattatcatt 180  
 ataaatacat aaatattata aaacagagga aagcagcctg gataccaggt tcttctttga 240  
 ttcttgagag gtggttggca attttagcct agcaaacaac tcctggataa atgtactgtc 300  
 atccttcaac aaagagacaa tctaaaaata atagagtaga caacaataag gacatcattc 360  
 actaaattaa atgatatgtc tttattccta gttaatcaaa tcttagatag acctgaccct 420  
 ttcaaaccctc tttctcatac 440

<210> 4099  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4099

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 tattaagcca ctcaattccc tctaattggc ttgcaatcaa gtattatgtt gagctgaaga 120  
 agtataatat taaaaacaac ataaaatattc attattattg agttatataa taagtagaat 180  
 aaaacaatca aggaaagggt gatcatttga cttttcacca ctaaccacac aaacaacaca 240  
 agagtagccg atcaciaaaga anagagatat tcgtaggtca ggcacaaagt agcttatcac 300

aaggaaagga ggagacaaat cacaagatta aacttacctt tacaccatca tgtgtacatt 360  
tcttctttat ctctctcca aaattatcct ttcttatacc atatat 406

<210> 4100  
<211> 422  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4100

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caaccatgat gcacatggat cttcaacttg gtttctacat tagccaatta atataagtga 120  
tgtggattgt tctacattag taggtccttg catgtcctta ttgccatata ttttaataat 180  
taagtcactt tatttattta tcggagtttt ctaagttgtg aatcttgatt ccaaaacatc 240  
aaccacatca aataatgatg aaaataaccc aaacatttga ttaattaaac gaaataataa 300  
gaagatgagt caatcctttg cgatgggttac gataagattt caatgaattn tcatttggtt 360  
atcatatctc taggatatta aaataacata aaaatcttat tatcatntng tggggggggg 420  
gg 422

<210> 4101  
<211> 469  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4101

atactcagct ttttcttcn agttgccctt ggcggtcgac aacacctatc ttctccaacg 60  
gcttcacggg cctaaatcca catggtctct gatgctgaag gagcgtgtgg cacaaatgct 120  
gagtggaaag ggcaactttg gaagataaaa gtgtttgccca actatcgtgt ttttaattggg 180  
tccttggaaat aacctccatc tctctaatac ttcccttaaa ttaaactatg atgtataaag 240  
tttttaggta agggaaattt gttaaatttt aaataattat tttaaaagtt tatatcaata 300  
attattattt atttattatt agttgttaat acatatttat tcaactttaa aattaagaat 360  
tatecttggtg ataataaaaa aattatcctt gttttattnt gttntgcaac aattganaaa 420  
gaaacaaata aagaattcat gattntaaaa tatcaatttg aaccaattc 469

<210> 4102  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4102

agctnttcan aatatttatg tattttctttt ataaccttcc ttctctcttc ttcaacctan 60  
 aagtttccaa aatcttggtc tcaaactcgt gactcttccc tcacgtcgat gatcatcttc 120  
 ttcaagaaac gccgtctgaa cttgcgagcg tctatcgggt gcgggcgtag ggggacacat 180  
 aaaattgcac ctgccagtca tgggagcagt tgctcgtatc catcacgtga cggagggtgct 240  
 tgccggcgcg gaggatctcg atcattcctt ggatcgctga cggaatgctg tggtcgggtg 300  
 aggtgatgta tgctgccgta tcccgaattc cctacgactt cccatgccgt atcagtattc 360  
 ttaatttttag aagcacacca accatatatt ctcttctctt tgcattccat tttctttcat 420  
 gctgacaaat ttaa 434

<210> 4103  
 <211> 456  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4103

tacgttacct atgaaaagaa taganattnt attgtttaca ttntgtttgt taaaaatcac 60  
 tcatattttg cagaagaaac atcctacttg aagtgggtaa aatcactgtg catggacagt 120  
 aaagttttct tttttgtatg gttctcaa at ggagggaatt agatgggtccc actaattttt 180  
 caattattat tttttttttt tgcaatttgt taaagttttt gttaatttat gggcacaatt 240  
 tattcacct cctaactctt tctgatgata ttacctggtg tacagtgaat ttgcggtaat 300  
 tcccattttg agactgatgt tgaagctctt atccogaagc aatttttagtg aagacttctc 360  
 canataatca tggactaaaa gtgtagctga gattcttaag ttcgcttttc ttttgtagt 420  
 ctaccattgt taatctcttt tatacataga tttttt 456

<210> 4104  
 <211> 462



<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4104

agctntgtcc gcanaaatca ctaataaccg ttttaaggtc caacgcctta nacggccctc 60  
tttgctttta tcgattaaca tggaccgttc aaaagcataa aatcaatatg taactttact 120  
gcttttgcaa gaactacgta ggtctgattt cctcatcgca attgaggata tgtaggagca 180  
aaagccccgc ttttgtcgac caccccaaga gatcgттаат ggтtcaacgc cttaacattt 240  
ctctcctttc aaaaacaaga gatcgттаат ggtccaacgc cttaacgttt ctctcctttc 300  
aaaagaatca aagatcgттt aatggтccaa tgccttaaac gactттtgтg cggttaaaat 360  
cgatcttgcg aaaaagatc aaaacaactt aactggaaat actgatcata cattagtatg 420  
attaaacatt gtanacacaa tcaaacaatt ttcaacaatt at 462

<210> 4105  
<211> 415  
<212> DNA  
<213> Glycine max

<400> 4105

atgcaagtca attgtaggaa acatctcgga gaggatcttt tctgtgcata tttgcgcaaa 60  
atgtcttgaa ctaagaagat gttgtccatc atctttctgt tcttgatgaa ggcagттtgа 120  
gtttcccaa caatagtctc acgcactgtg gctatgcggt tggccaaaat tctagacaca 180  
atcttgтatt acaaattaca gcaagatatg ggtctaaaat ggтtaacctg agaggtctga 240  
tcatgcttag gaataagcgc aataataaca tggттgagтт gctттaaaaa тttgtcagтg 300  
gtaaagaatt catttaccgg ctcatagata tcatcacaa tgatattcca agcттtcttc 360  
gaaaataaat cattgagacc atctggccct acagctттat тgttatccat cacag 415

<210> 4106  
<211> 323  
<212> DNA  
<213> Glycine max

<400> 4106

ttgtcagcta tgtggagcca acttcaactg tctттtgatg атттtatgaa gcatttctga 60

ggctatgaag agtgtgttaa gagctccaaa tctacaaaca tggtagagaaa ttcattgttta 120  
 ggtttaaccc tccctgtgag agtgacctac ttttgaattg ggccttcaaa gctcgcaata 180  
 acttttagata caagtgtgaa attatgtttc taagtggaat ccttctactg aggagaaaat 240  
 ctataatttg tgacgttgaa tcacacactc acttttctat aaagaccggc cgtggctggt 300  
 agtggagaaa tctaattggtg tag 323

<210> 4107  
 <211> 380  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4107

agcttcaggc tgttcaattg ctccatattg ctgcacagaa gggcaaattg ctgtatggtg 60  
 gtcggtagag gagcataaac cacagagtct tacgacaggt acatatcttt gattcatggc 120  
 cagttggggt accagggttaa ccaaggcgtc tagcttacct tcaagcttct tagtttcaga 180  
 tgatgcagct gagtttgagg ctacctcatg cactcctcca atgactatag catcatttct 240  
 agcgctaaac tataaggagt tggaagccat cttctcattt aaattcctgg cttcagtang 300  
 ggtcatgtct tcaagggtc caccactggc agcatctatc atacttcttt ccatgttact 360  
 gagtccttca taaaaatatt 380

<210> 4108  
 <211> 348  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4108

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 gtaactttga tgaatgagag tcttgtgaga cacaactcaa agttcaactt ctctctcttt 120  
 ntcttcttcc aatttcatgc tccctcctct ctctttctct ctctcattct tttcttccat 180  
 tgaagcatca tctccaagct tcttatccaa ggctcatctt ggggggtgaag ctcttcttcc 240  
 catggcttat tctttaatgg atgacgctc ctctcacctc ttttcttttg tcttacgctg 300  
 catctccatg atggaaaatc accattaaag gaccccatg aagctcaa 348

<210> 4109  
 <211> 358  
 <212> DNA  
 <213> Glycine max

<400> 4109

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 gaatcatcat tgaagggcct tattgatgct caaagatcca tcttccataa aagcttctca 180  
 agcatgcttt catacaaaaat acacaaaattt cttgtcgcta ggcttgatc tatggattat 240  
 tggagttaaa tactccaatg caaaatcaaa ctttttcgct ttcaacacta aatataggaa 300  
 aaactttcta ttcttcttgc ccaataagaa gaaccctcca aaaccggacc agtgatga 358

<210> 4110  
 <211> 457  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4110

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 tagagccatg cgccatgtct attttgatac antttttata taatattatg caggtccctt 180  
 aacgtgggta ctatatatgt atgggtactg gtagctatgc ttcctcatca taaatcatgc 240  
 ttattggctg agatttattn tctcagatgt gcataattac caaaatatgg tgcaaaattt 300  
 cactattcct tttgtttcct acttcattga cgatacttaa tattcttaat ttggacagct 360  
 ctctttgttc cttctttttg cctaaaaaat tttaccatac atagacatag agttcattaa 420  
 atctagcact gaccattatt acaaaatctg actggag 457

<210> 4111  
 <211> 353  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4111

[illegible]

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<223>      unsure at all n locations
<400>      4112
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<210>	4113
<211>	370
<212>	DNA
<213>	Glycine max

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<223>      unsure at all n locations
<400>      4113
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1756

aagtttgcac tegtctcgat atagcatttg tagtaggagt tctgggtaga ttttttgagt 360  
atcctggaat 370

<210> 4114  
<211> 469  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4114

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actgttggcc tttgtttgta ggggctattg cagcctttct agataattct aggcttctag 180  
ataatagcca ggagcttaca tataatgtta gagataaaca tttacttata gataaaaggt 240  
agaagataat tgtaccttgt agataatgtg tgagcttata gataattaat tatctgctaa 300  
tagataagat attcaaatac atttgaatat tcataagtta gagatataac ctgtttgttg 360  
gagagcccga ctactaaggg tcaatcgtct gtgctcctgt agtagggcta acattgaggg 420  
tggaacacgtg tctttgcgtg tcatatanga tgtcacgtgt attntatgg 469

<210> 4115  
<211> 427  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4115

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ctttggttct aatgtcccta cagcaagtgg ccaattcaat tccaacagac agtagcaaca 120  
cccccaagat cccactgga aactgcctta aaatgtgtgc caaagaagtt cccaacacca 180  
aaccaaacac caatttggca acaccaagaa gtgccacaca cccaccactc cttccaccaa 240  
atttgtattg tcttgcaagt ccaccagcac catggcaaca tggcattgca ccaaaccaac 300  
taccaaccaa attcatcaac cctacactca ctgaaagtga agtggcagaa aattccctct 360  
ctgggaacaa atcctttgac aacttgcaaa cagctatcac tgagttttaga attgacaatg 420  
ggagctg 427

<210> 4116  
 <211> 495  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4116  
  
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 aaccctaaga aaactatatt ttctacacaa aaagtacact tctctatatt tgcatagagg 180  
 gtgtttttcc taaggactga aagaacttgt ctgagatttc ataagtgatc atctaggctt 240  
 ctactgtaca ctaaaatata atcaaaataa acaactacaa atctacctat gaaatccctt 300  
 aagacatgat gcataagcct cataaagggtg cttgggtgcat tagtgagccc aaaaggcatc 360  
 actagccatt catacaaacc aaacttggtg ttgaaagcgg ttntccactc atcacccttt 420  
 ntcactctga tttggtgata cctaacttta agatcaatnt ttgaaaagat attggcacca 480  
 tgcaactcat caagc 495

<210> 4117  
 <211> 464  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4117  
  
 ntgacttaag tcatacaagag attataaata tgtgaccatg gcatgaattt catatcatct 60  
 ttctaaaaca tctctttcaa caatcaagaa atctatcttt caatcttctc tctcaacatc 120  
 attcaacttt ttctatagaa ttttctgatt ctttttctct tcatctttct aaaagttntt 180  
 gttcaaaaat ttctcttcta agaaaagttc tttgttcaaa aacttggtgct attcatcttt 240  
 ttcagtctct tctcccttg ccaaaagaat gaaggactaa ccgctgaga attcttttat 300  
 ggtacaagtt gagggtagat ctacttgggg attgttatac taagaacaag agaggggtaca 360  
 tctcttggtg atcagttcaa gtggagggtg catccacttg ggttttcaaa gagaacaagg 420  
 gagggtagat cccttggtga tctttggctt gtaaaggaat ttac 464

<210> 4118

<211> 404  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4118

agcttacaca aacattcatt agtccaacac aactcaaca aatagtcac atccgtccat 60  
 agtttcaatc aatcatgctc agtatgatgc atgcacctga cctcaactct caaatgcaat 120  
 gtgagaccat cccaacgaa atagcctaag tgtgtccaca cgactctctt acttaggaga 180  
 actaggcagt aagtgtcaag gttaccctat cgtgcaatgg caactcccc cttccccctcc 240  
 cccccacgg tgatcagcct gagtcttaag ggagttccaa atcgagtgc atgcactgac 300  
 ccagcttata ctatttccat gtcatatgaa gnatgaaaca agggcaccat caatgctctg 360  
 accgtggata atataagata ttaaaccctc tccctctaga gatg 404

<210> 4119  
 <211> 351  
 <212> DNA  
 <213> Glycine max

<400> 4119

accaaacccg ggcatactca gtccgagaga acctatgacg ttcctaaaca ggcgagctct 60  
 cggcagtcaa ccaataaaat aacatagccc acgaagcaag gaggcttgag cggcgactag 120  
 cccgctatat atcttgcgtc gtatatgaaa attagtcgct ggcaatcgat taccattcgg 180  
 gggtaatcga ttacaggggt taaaaatgga gacaccatga taagtagctt ctggtaatcg 240  
 attaccaatt gtgtgtaatc aattacacaa tgctacctgc tactgcgaat cgatttacat 300  
 atatgtgtaa tcgataacac aactgtatta gtagacttca ctctgcttct c 351

<210> 4120  
 <211> 470  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4120

agcttgtggt tggtgtggag ctctatttga agaacctaca taagatntgt tagaatgtcc 60  
 tagaaaaaag tggttagtggg accagaatat gcattattat tttgtggtct ccagccataa 120

ggctaatttg aacatgagcc acctctgtag ccttgatagt ttccttgga gttctattga 180  
 ggtcttgctt gattctatat ataatgggcc tctcttctct attgacaatg ctgaatagtg 240  
 gccattctga tggtgaccac cacagaagtc acatcttaga actcgttgaa cttgatgagc 300  
 ttggtgtgtt ttttgtgatc caccttattc atattgttga gggagttaac ctatctgctt 360  
 ggtaaggcc tctatttggt gagacaagag tttgttctga gccaacattg catttagagt 420  
 atcaactcca ttataccatt tctttgaatc ggagctctat catggtgact 470

<210> 4121  
 <211> 484  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4121

cgacactatg aaactcagct tataagtgcg ggtctgggag acgaaggcca agtggtcgcg 60  
 atatacgaag atgatgttct gagtacattg gatttggtac gaccatgcc tctgatttc 120  
 cagctgggaa attggcgagt ggaggaacgc cccgcattta cgcaacgagc ataattgttaa 180  
 cctttacggt tttaaaagct ctatagttgg gcctaggatt tagagttttt ccttttggtt 240  
 aggctttgtg tcttttggtt ttgaatttat aatacaagga cctttcttca tctgttctta 300  
 cgtctctacc cattctcatt cttttgcatt tttacttctt tttttctgaa acggcatatc 360  
 cgatgacgag tccccgaag gtactaatac ctgngaccgc cttatcaact tcgagcaaga 420  
 aacgaatcan acggaagatg aaggggaacga ggaagtggga cttccccag aattagaaag 480  
 gatg 484

<210> 4122  
 <211> 459  
 <212> DNA  
 <213> Glycine max  
 <400> 4122

tgcgcatata tggattcgct cattacttta taacagctta tgcattccaa gcgctacaca 60  
 attgacctgg ccgaaaatct tttataaaaa tattcatcag cgtccaacac atctttttgt 120  
 ccaactcgct aacaaaactt gtggaaatat tttatacttt catttaagat ttcttcatcc 180  
 aaaaatgaac actcgatata ggtcttttct ctatgttggt cgaatgctaa ggggtatttg 240



tgcttacatt cttcattgta tgaaccttac actgatattc cttttcgttt ctttcaaaga 300  
 tgctctaattg tctaaatttc aaacatgaag ataaaacaat tgtaaataata agcacaacct 360  
 ctgatcacia taaagctaca caacgaggtt cagcacaagg agaagaattg aagtgggaag 420  
 atgcataaat attgtatata ccttcagagg gtgtctata 459

<210> 4123  
 <211> 437  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4123

tgtactccat tgaatgcccc attgtgcttt tcatctgccc tctacttcc acaatcctgc 60  
 tccccctcta tcttctctca natcaaagtc catagagtgc tctaactatg agaagcctat 120  
 ttcaagctac atttcacttc cttcacttga aacacgatct ttgtcagatc tataactacc 180  
 cctgttacia ccacaatggg ttaccactag aatgggtatcc tccacaattc ttactaaatg 240  
 aatcttgtca ttgatcatta cccttaacga tgaagatata atctgaaggg acgaagtga 300  
 caccataatt caagcatagt ctgctctcaa gaaattcttt gtttcttcat ctatgtcaac 360  
 caaagctcat attccattga caatccttga taagtattct tcccccaact aacaagggaa 420  
 tgccatagca ctttacc 437

<210> 4124  
 <211> 358  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4124

agcttagaga tgcaataatt taatataatt tactgtattg tacttagtat ctcataagta 60  
 aactaaacaa cgtatcgaat catctaattc attaatgttt tattnttgta atatgtgaag 120  
 gatcaataaa acataacaga caaggaagaa cattttttcac gaacgaatga aaagaaacac 180  
 ttatgtcatg ggatgatcaa cttaactacc ttagactatg ttaatatattg aataacttac 240  
 gagacattta tgaactatta taattctact acttttaaac ttattcttgt aataaatgta 300  
 agatgaattt aatttgtcta tcttatcata aggctctgac atgtttgttt gacttaca 358

<210> 4125  
 <211> 356  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4125

gtactgaacc gtaccatgag acgtatgtcg tggtttgaga tctcctttct tcttttgcca 60  
 cagtgcctccg atcctcctag tgtcggcatt tgtggaggag acgtgatgca attctacctc 120  
 gcaagggcat tggatagaaa actcctagta cattggggcca gagatgcacg agaaggccct 180  
 aggggttctta tgagccttac ggtagatttc gggcccatgg gctaagtacg agcccactta 240  
 tctttgaaat attagattaa ggtttcatta tttttgggcc ttggatttag ggctccataa 300  
 cgtacatagg gtaccctaen atataggatt tttcagccct tagattgtag gacatc 356

<210> 4126  
 <211> 395  
 <212> DNA  
 <213> Glycine max

<400> 4126

agcttgagtt gaaatccacc aatgatggaa gatcagggtt cagtttttca tcatatgagt 60  
 tacaatagat tgtgacattt agtatgtcaa gattcatcat ctaattgtta gtattgtata 120  
 tgaatgggaa catgtggaaa attcgagttt attgctgtca gaatcaaagc agggagaata 180  
 agtttggtta aaaaacaaaa atagtgtctat ttagtgaccc acttatattt atgttggtgac 240  
 tagtgaccac ttactagtga cttcagggtt gattacatga cttactgggtt ttcttgaggt 300  
 ttcaaaaatt atactaatat gtagagctgg caaaatgacc tgacccgatg gggtgggctg 360  
 ggccagaagg ctgcacatag ggtcatgatg ggctc 395

<210> 4127  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4127

tattatttta tattgattgt aactgtaatt agtactcacc aactttntac ttggactaaa 60

aaattattct ctctatttaa caccagtcca tcacaaagag taaacataca ttnttatcta 120  
 attaaaaaaa tgattaaata tgttttttta tatctaaaag atatattatt ttttaagttaa 180  
 tacatacttt tgggtcaatta ttaattatta aatacctgaa aaaaatttat ttttaacatag 240  
 gacctgtatt actcttactc tgttattccg atgttccgta gctatttctt aatcataatc 300  
 gntcatcctc tttgcaaccc agcttctacc ctttcgttcc tctntgcaat ccagcttcta 360  
 ccctttcttt gatacagcga cctcgttgaa nacctatatt acatgaggct atgaagcacg 420  
 gatacccaag tctctt 436

<210> 4128  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4128

agcttntana aaanatgact actttcntat agttaaagca actcgtatct tccaattacc 60  
 actaaataat ccaatctttt tacctaataa aagaaagaat taattacaag gatatgttgt 120  
 atgatacaac taggcaacaa agaaagataa atttgtttca tctaacaaat tacaacaata 180  
 ggtgggtccag tgatcaagag taaatttcag aatgacaact aacggaacta aaatgacatt 240  
 cttttacaac taataatgag ctttcaatgc caaagttata gcctataaat tcaacataat 300  
 ctatataaca tttataaaca ttattagaaa gaaccaaaaca caagtatgta agaccaaga 360  
 ttcacagaat tgatgcaata tgaaagggat ggccacacct tttttaagag aacactccat 420  
 gctctttgat tcaa 434

<210> 4129  
 <211> 443  
 <212> DNA  
 <213> Glycine max

<400> 4129

tgtgcgaaga tccatgtata aattgcagct tttgggtgtca atccatgggt atatgtattc 60  
 aagacatcct actatacata ccacaagtat aaaaggaggg ccaccagga cccacttcag 120  
 ggtggatcct ctcttgaacc cggaaaaaaa ggatgactca tgagccctca ctaggcaggg 180

ataatgaata atgaaattga tagcacaaaa agatatttta catcaataaa acatgctaca 240  
 ttaataaaca tttgaagaac ccaacgaacc cctcgaagga tatcaattac acccaagaag 300  
 attttagaga cgccagacaa ggaagcagta tttcaccatt gatgaattgt aacttcaatc 360  
 aaaacaaata tgctattagg gaggtaatga aacaggggtg tggccccctc cgaatagaat 420  
 cgttgaacca attaccttga agt 443

<210> 4130  
 <211> 439  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4130

agcttgctgt gccatccncg tttcaaccta tacctattcc gggctcatat ccgtccctca 60  
 acataaccg agccaccatc atagcgacac cagataagcg tggctacacc agaggagatt 120  
 tcacataagc actactctca atttccagtg cttggaatga tgttttcaat gactcctctg 180  
 cagcctcaac atacgacata gaagacaaac aacttaccaa tatgtcttcc tccccgata 240  
 ctataaccag atgccttcc actacaaact ntaatttctg gtgcagcgtt gacgggacca 300  
 cccaaccga gtggatccaa ggccgttcta acaagcaact gtaggcaggg cttatgtcca 360  
 ttatttgga ggttatttga cacacgtggc gcttatggat gtgaataagt gtgtgggttaa 420  
 cacttgatat gacaactac 439

<210> 4131  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4131

tctcccccaa ttttctataa ataggcggag aagtgaagt aataaagggt gateccctta 60  
 ggctcttctc tctctttcga atttgcttgg aaaaattgtt tccgtgaaga anatccaagc 120  
 cgaggcgctt ccgaaacgtt tccgtaagga atctcgcgaa ggtttcgacc gttcttcgac 180  
 ggtcttcatt cgttcttcat cgttcttcga tcttcaacgg gtaagtacct cgaaccaagc 240  
 tttttttatt cattctatgt acccgtgggt gtccacattg tgtttcgtgt atttatattc 300

tcgtttcggtt tactttttat accccctttt gacgtgctta agccatttta ttttaagtcac 360  
 ttctcgctta cacctataat aaaataaatt tccaccgatt cgttgaattg 410

<210> 4132  
 <211> 375  
 <212> DNA  
 <213> Glycine max

<400> 4132

agcttttattg cctaacaggc caacttacia tatctagccc caagagactt atcataagga 60  
 tgcacaggcc atagtggagt atgtgaaaag attgtatgac caagtgaagg tgcgaattgc 120  
 taagaagaat gaaagctatg ccaagcatgc caacaagaaa aggaaggaag tgggtacttga 180  
 acccggtgat gatcctggac atttgagggc aaatgttatc caagaaggaa ggaatgatga 240  
 gaatcctgaa attggccaaa tgcattgctaa aggcccaagt ggagaagggc aaaggcccaa 300  
 gtggagaacg acaaagcccc cgagtggaga aagatgaacg cccatagaca aaggctctac 360  
 caagactatt aatta 375

<210> 4133  
 <211> 448  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4133

tanaagaata cttaattaaa caacttaaga gtgaagtaga aacacttggt ttatactggt 60  
 tcaactcaat agagctacat cccagttctc ctttacataa ttgtaaaggg ttccactaat 120  
 caaaactttg attacaaaca agtattcaat cctgccactc ctgattgtac aagtattctc 180  
 tatgccactc ttgttacacc cttagactcc cctgaatct aagaacaccc aagtattggt 240  
 taactctaag ccactcctag atttcacaaa caaaagtttg aatgaatata atgattcaat 300  
 aacactcata gaattcataa atagttaagc taaaaggcca agttcaatta acaactcatt 360  
 agttcatgaa caatntatac ttttgtaaac atcaaaatcc aaggatatgat aaacaatata 420  
 aattntgact aagataaaac ataatacat 448

<210> 4134  
 <211> 265

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4134

agcttncaca acatctaagc aattctacat cctacacatc atgaactatc aaaaccaagg 60  
aaaacaaggc agaggcggaa aactcagccc aacacaaacc aatatacaca gttttctcac 120  
ttaaagaccc cagtaacatt tccttcgttc caatatgttc accgatggat cgactcgaag 180  
actactggaa gtccttagtg cataagtcta catcttgacc attgggatct actaaaagat 240  
ttccagaacc ccatctgtac tactt 265

<210> 4135  
<211> 269  
<212> DNA  
<213> Glycine max

<400> 4135  
agcttctaata aatgaaagtt ataataattga accatgaact ctgcttgac gaatttggtt 60  
cggagaacaa gaagagaaag acaaataaca ctggcttaac gtagcgcgtg cttctgttgg 120  
atcgcgggct taacgcgcgt gttgcaagct tagcgcgttc ttatgttgga tggcaggcct 180  
atcgcgcgct tctggtggat cgcgggctta gtgcgtgacg cgcgctcacc tatctttgca 240  
aataataaaa cggcagtatc ataattaaa 269

<210> 4136  
<211> 427  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4136

tctcccncaa ttntctataa atagggggag aagtgaagtg aaaaagggtt cagccccctta 60  
tgcacttctc tctctttcga atttgcttgg anacaatgtt tccgtgaaga aaatctaagc 120  
caaggcactt tcgaaaccgt tccgtaacgt ttccatgagg aatttcgcga aggttttcga 180  
ccgttcttcg acgttcttca ttcgttcttc gatcttcaac gggtaagtac ctggaaccaa 240  
gcttctcgat tcattctatg taccctgggt ggtccacatt gtgtttcgtg tatttntatt 300  
ttcgtttcat ttactcttta taccncttt tgacgtgctt aagccatttt atataagtca 360

tttctcgctt aacctanaaa taaaataaat ttccaccgat cgttcgaatt gtattatccg 420  
ttaactt 427

<210> 4137  
<211> 474  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4137

agcttgagct gactctatct tggatcattt ttatcagggg ttatattggc aacttggcat 60  
aataatatgc atggaattat gttttggctg atggccatgc caaatatttg cccacctttt 120  
atctgtaaaa agtttggtat ctcttattct atcgtatgag tacatggaaa tttatagaag 180  
tttagtgatt cagtcctttt attaaatttt cttttgctac tcttgaacaa aatatatgtc 240  
attatcaaat tggtaacaagg tagccaaaag atcctacctt ggattggatt agaaaggcag 300  
agggaacact taagttgtgt aataatatgg acagtatgtt cctgtctaaa atacaaaatt 360  
atatccatac ataattnttt gtgcataact gcatataaca taaataagaa ttgtactaac 420  
atthagttaa acatacactg aaagaggata aggtcacact cacatatgac ttat 474

<210> 4138  
<211> 392  
<212> DNA  
<213> Glycine max  
<400> 4138

tgttgaacct ctcccattac tcatataatg tctctccaag ttgttgctt attgatgcaa 60  
gctccattgg agctttagg cctaggatct tcttcatcaa tggattcctt tgcttcttgg 120  
aagatgaatg gcagtggaat gaagaaggaa gagagagagg agacgccact tcaaggagaa 180  
gatgagtcta gaagaagctc accaccatat gaggccatgg ataaaagctt ggaggaagaa 240  
agagatgaat gaaggagag ggagagaaga gcacgaaatt ttgtgctcca aatgagctct 300  
gaaatctgaa gtttaatat ccaatgatca aagttgaaaa aaatgcacac acatgacctc 360  
tatttatagc ctaagtgtca cacaaaattg ga 392

<210> 4139

<211> 168  
 <212> DNA  
 <213> Glycine max

<400> 4139

ggtgagagtg agatccttaca gtgtgagtga acgactctct gtgagcaata atcttttgcac 60  
 gaatctctga atcgtagacc gaaacgcttag atgaggacaa gattacggct atgaatgtgc 120  
 atacacaagg gttatgccct ctttgcttac ctatgaaaac atgtggat 168

<210> 4140  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4140

aatgtcaaag aactgggtgt tgaaaaagca taacaagact ttctgtgatt ggtttaaaga 60  
 tacaatcttt gcatgtgaga atgcttcaga aacattaaga aagctagcag ataggcctaa 120  
 aagaaatggt ataacttggc aaggatacga cataaacaag tattcatttt acacaaaagc 180  
 acaagatgag aaaagtacaa tgcagaacag cggagtcacc ctaagggtg aatctcaaca 240  
 cttcgcaagt gtgaatgaca ccaatccctg tgtagcttcc atcccttact ttgggttcat 300  
 tgatgaaatt tngagctta actatgtgaa atttactgta tgtattttca aatgtaaagt 360  
 ggttgatagc aacaccgtg cgcacaccga tgatatanga tttaca 406

<210> 4141  
 <211> 472  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4141

agcttaacat cagaccactt ccagggtgct ggaactactt cacatggatt tgatggggcc 60  
 tatgcaggtt gaaagccttg gaggaagag gtatgcctat gttgttgtgg atgatttctc 120  
 cagatttacc tgggtcaact ttatcagaga gaaatcagaa acctttgaag cattcaaaga 180  
 attgagtcta agacttcaaa gagaaaagga ctgtgtcatc aagagaatca ggagtgaaca 240  
 tggcagagaa tttgaaaaca gcagggtcac tgaattctgc acatctgaag gcacaccca 300



tgagttctct gcagccatta caccacaaca gaatggcata gttgaaagga aaaacaggac 360  
 tntgcaagag gctgctaggg tcatgcttca tgccaaagaa cttccctata atctctgggc 420  
 tgaagccatg aacacagcat gctacatcca caacagagtc acacttagaa ga 472

<210> 4142  
 <211> 465  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4142

tctgatagct ggttgtaatc gattaagaca acactgtagt cgattaaaac aaagtttttg 60  
 cctctgaaga aacttttcta acttagaaat gtttcttcac actaaccatg atgatgcatg 120  
 atgcaataca gatattaaat ttactaagac acaataacca aggtaacaac caatataaat 180  
 gccactcaag gaagtggggc atgtaaaagc caaaaacttc gtcaaaactt cttcaagctt 240  
 ttccttgagc ttttaagcttt agccttttagg ttgttcacca tgttgctcat gttgcttata 300  
 tcatgttgct cccctatct ctaacatata gtagtttttc attntgacaa ttataatacc 360  
 aattctctaa atagctaagc aagtaatatc aaagctatac tacacactnt ntgataaatg 420  
 tcattcttct gaaattntaa tgggttgtag tcggagatta tacta 465

<210> 4143  
 <211> 467  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4143

tagcttgacg agaggggtggt ttcataact catgctntga aagatattgg cgtggattat 60  
 ggagtcactt tcatgacata tgaagtcagt gtggatgtgc atgatgagct gtccggcatg 120  
 cagaacacgc gcgatgaaga ttacaatgaa aagaaacaac ttccttcacg ctcaaagcca 180  
 gaggcagata cagttgcacc atagcataga cctaaagaac aagaaccaca tggttttcat 240  
 gccaaacaag ctcaaccac tgcgacagct acgtggatto cttctaataa gggctcttat 300  
 cacgattcaa tgcacgtctc atatccacca tcaagaaata ataattcacc agctaactt 360  
 tcagatgtta cctcatcaaa ggagagaatt actgatgcca aaggaaaagc tatttctggn 420

tcttatgtct ctgaagcaat tgcttccatg gacatgagaa atgacct

467

<210> 4144  
<211> 476  
<212> DNA  
<213> Glycine max

<400> 4144

tataacacta agctggacgt cctgctaaat aaaattaatc tgatgcggtc aacattactt 60  
cacatgtaga aagtaatttc aaaaacacac atagctataa aaaataattg aattacgaat 120  
aatgtatttc taagtaatca tgtaagtgtt agttgtcaca tcttccctgc tgtagcctat 180  
aaagactaat tcttagtaat tgtgaaagta attaaaaact cttaaaaaat cctatggtaa 240  
ttagatacgc attttctagt tgtagctgac taacaggtaa gttacaaata ttactaatta 300  
tgatttgaag catcccatgt tctggtttga atttggttta tccttagttt aacttctcat 360  
cttgctctta agagaagtgg aaagtcttta ctaagaatcg tatacatgca ctcccaccat 420  
ggcttcaatg tatccccaac atgaattcta ataacaacct tatattattg attaac 476

<210> 4145  
<211> 460  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4145

agcttagaca catttagcag acaaggatgt ccaccaataa atataattgc caggaacatt 60  
taacttactt gatttcttgt aagtgtcacc agcattgctt cttgaagagg acaacactgg 120  
atcagcgact gatgtttgcg aggctagaga tcgaattaca ctacaattcc tctagctagt 180  
gcagttactt cttctcgttg acaagccatt actgctgata aaatccctag acaccaatct 240  
tactaaattg ttttgatgct cttggtgatg atttacatta ttcagataag aacgggactg 300  
caaagtacca atagcctgtt aatatacttc agcagccatg gatgaagaaa cattatcata 360  
gaggatgaag atacatctta cattttggat cccaggaata tcaacagggtt ggattccagc 420  
taatcctttc gtgagtaatg cttnnaaaat aacaaatatg 460

<210> 4146  
<211> 447

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4146

agctcataaa tgtcttttct gtgattaact ccatcaagtt gtgattgata aatgttttac 60  
 ttattaaaag taattntcta gtctccatag tatacacttt taaatttttag tccttaogga 120  
 aacatctcaa ttttaatcct tcaaaaataa gacttttcac ttttggttcg tgggtgttga 180  
 ctttaatcct aagaaaaatc ttcagcagcc aaattttctg tagccacaga ggatctgcgt 240  
 tcctttaatc ttagtaattn tatattgaat tagtccttct aatattntaa ttgaaaaata 300  
 atatttttca ctactatnta acttcatttc ttaatcgat tgacattcta gtttaattca 360  
 aaaactgatt ctaattctca ataactgaca aaaatatagt ggtgagaata tcggcttttg 420  
 gatgtanata aatagtcact attatga 447

<210> 4147  
 <211> 200  
 <212> DNA  
 <213> Glycine max  
 <400> 4147

agcttcgtgc attgcacaca cactattaag agtgcaagac cattaacagt cacaattgac 60  
 actaaacgta aggagctcga catgaatata tacctttgtg ataatgactt ttttattaaa 120  
 tttgtctatg aacaaacaga atttggaccg atttacattc cacaagcaat attaataacc 180  
 acgtcgcgcg attgtgacgg 200

<210> 4148  
 <211> 442  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4148

agtctattac ttntaatcag gatttctttg ggaatatttt ggaggacaag aaaagattga 60  
 aaataggctt aaagggtgtt aaagatctcc ggaaaggatc gattctacaa gattagttaa 120  
 tcttgaanag caactccaaa gagattatga ccaaactttg tttcaagaat tgctccacta 180  
 tcagaaatct tgagaaaatt gcgttaaact tggagatatt aataccaagt tcttccatgc 240

ctaaactggt gttaaaagaa tgaagaacaa aatacatggt ttgttccctc ccagaggcaa 300  
 atggtgttta gatgattaga ttttaaagtt tgaagcttag aggtactttc aagctcactt 360  
 ttaaattctc ctgtgcaggt gtgttctaac cttantttctg ttaataacaa tcccaaataa 420  
 aataggggag aatgaaatth gg 442

<210> 4149  
 <211> 451  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4149

atgcgagacg gagaccaaca tgctagctat catcgccaag taccaagaag agttaggtct 60  
 agccgcggcc cacgagcata tgattgcgga cgaatatagc cggaaaaaga ggctagagga 120  
 aggggtgatcg actctntaca ccaagaggca accatgtgga tggatcggtt tgctcttacc 180  
 ttgaacggga gtcaagaact tccccgattg ttagccaagg ccaaggcgat ggcagacacc 240  
 tactccgccc ccgaagagat tcatgggctt ctgggctatt gtcagcatat gatagactta 300  
 atggcccaca taattagaaa tcgttaggaa acttgtatgg tctctcagac cttgactaga 360  
 tacgacttcc tttttgaaat aaaatgagtt ggtcccatgt ttctactcca aaaagcttgt 420  
 gcaaatcaag tcacttccgc attttatctc t 451

<210> 4150  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4150

ttgagccana atcctgactc accatanacc ttgacccagg gtgagaatgt caatccttac 60  
 cctcggaagc ggaaagaata gaagggaat ttccaatcaa agaacaggaa agaaggaaga 120  
 tttccaatca aagagaaagc aaaaaagaa aagaaggaaa attccccaat caaagagtgg 180  
 gagaaagcaa aaagaaaaga tagaaaattc ccaatcaaag aatgggagaa agtaaaaaag 240  
 gaagaagaag aaggaaagac agctcctgat cagggatcga aggaaaacag aagaaatgtg 300  
 cagaaaggtc tttgaaccgg acaatatctg aacaatacag aattgtcacc aaatgaacaa 360

aaagaaggaa aggaaaccac gacctanaat ggtcttctcc ctttgattac

410

<210> 4151  
<211> 455  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4151

agctntgnng aattcagatt attggttcat gacaacttca aagcaaataa tcccataaat 60  
ttcagttgat ttcaaaagat gacaaattaa gttactcaaa gatggcgaca gaaatccctc 120  
cccattactt ttcttgccct tcacatgctg gaaaccgaga caagaataag attaacaaca 180  
aatcagagc caataattct gtctacattg agaatgttgt cagttaaaag ctttcattgg 240  
caacaaaatt acaaggttgg atacgaaatt attttggcaa ggcacaccat atgccaagtt 300  
ctttacacaa aaagtnttag ttgaatttcc aaagattgta cataaatggc taaacaaaaa 360  
gtcatcatag aatgtaatat atgagtctaa caaggtaatg ttagtaccat ttctttacat 420  
gagaagacta cttcagcaat ctgtaaacna aacat 455

<210> 4152  
<211> 411  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4152

tgctattcga atggaacccc caagggtcaaa ctctaaactn tccaaccatt ttccttcttc 60  
ctcctttcta gttnttttat tttttttttt atttttttat gcagctgaat agtgtgcttc 120  
atgttatgtt ttgagagat tgctgtggat aacatttcaa gcggaacaga cactgtcata 180  
aaggttccaa attcaccttt cggtggcttt gtcttttctg cattgccaaa gggtcctttt 240  
tctctttgtg tgaccaattt tccgtgtgtg ttgttgcagg ttgatagcgc gaacaagcgt 300  
gggagcttgt tggaggtggt tcangttctc actgatatga atctcagtgt tagaagagct 360  
tatatttcct ctgatggaga atggttcatg gatggtacgg atcccttcac g 411

<210> 4153  
<211> 399

<212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4153

agcttggaag aatatttcat gattctatag aagtcaaaaa tgtaattat tgtgggttaa 60  
 aaaaatgatt atgttcaaac ttattagaat aaattaaaac attccgcata agctacttaa 120  
 attaagctaa gctcaaataa attaacattc tttcatagcc tctttcattt tagttccata 180  
 agttctacca aacttatatt ctcttttctt tttctatctt ttcttatatt atactttatt 240  
 tcttctatta aattattatt atttttggcc gagacaaagg cagcgcttga gaaaaaaaaat 300  
 tggaagatca aaataattaa aattataata tataaattaa atgtaattat tatgataata 360  
 tcgtctctta tgagtgattt taagcatctc agctatttc 399

<210> 4154  
 <211> 453  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4154

tcacctttag gtctctctca tagttgttgc atgagaaaac atgctctatt ttcattctcc 60  
 actccaagta ggcttcgga tcattctttc ctttaaattg aggaatgttg agtttaatac 120  
 catcaatttg gttttgtcta ggaacaccat cattccctct tctctctctt tcttcttcat 180  
 tatgatctct attctccatt tgatccaacc tctcatggag cgcattcatc cgttgtttca 240  
 ttaacctctc caaatgttgc atcgaagctt gcatttgga ttgcgaaagc cccactccat 300  
 cattaggatt agtacctgac atctcaaaca aacaaatcaa atgtaacaag acaattatag 360  
 ttgttggttg aatactcac ccaactcaagt gtatcacaca attatggctc ttctctaattg 420  
 aaacactctt gccttntacc actctaattc ccc 453

<210> 4155  
 <211> 148  
 <212> DNA  
 <213> Glycine max  
 <400> 4155

cgcttgaaac tcaacgaata gcttgattaa cttgtttgaa gaaattgtgg ctgttacatg 60

ccccactccc tggagtgaca attgtattgc ttgctatttt ggatgatgca tcatagtaca 120  
tattgatatc tcgagcagca ttgctcat 148

<210> 4156  
<211> 468  
<212> DNA  
<213> Glycine max

<400> 4156

atactcaagc ttcttgagat gcctttcggg aatctcccaa atatgatgaa attttcaaac 60  
tagacacaat taagagagtg tctctcttgg ttcttatgtg aaaccttagg ttcttatcaa 120  
agaattctat tctttgtagc gaatcctcct caacttatca atctcccaag attgtggcgt 180  
tgctcttttc atcaccttct ctaactcggg tttttccctt tcttttcccc aaaagagccc 240  
caaattgggt ccacgggttg ctgatgctaa aaattggatc cgcaaatcac ggttccatca 300  
cattgcgtgt gccaattttg ttgttgtagg aaatcttaat gcttaactaa aatgaattta 360  
gctataattg ctctaacaca attctaaaat ttgaaaagtg actcaaggat ttagttgtca 420  
agacggaaaa tccgcatctt gacttgagtg tggactctca agttacta 468

<210> 4157  
<211> 333  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4157

agcttcttat ncaatgcact ctcttggcgg taaagcttct ccttccatgg cttattctct 60  
aatggatggc acctcttctc atggctgaaa atcaccattg aaggatctca ttgaagctca 120  
tagatccaac ttttatagaa gctttctcag ctagcttcca tcaagcgtac cttgcgattt 180  
gtagatgtga gtaccaagg tagacctgt gtctgttata aacctatatt cctacacaag 240  
ataaagttaa gaataggaaa tattgccaat ggtacacctt gcgtaccttg agttcctgtg 300  
gaggtggaac tttagtaata tgaggctttc acc 333

<210> 4158  
<211> 408  
<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4158

tctctcgngc catttcctgc gaagggcaaa cattggaaag ttagttntac cagtgggaca 60  
ctactcttaa aacaaaaatg acatacaacc tcttcccata aatacaaaaca tcaatgtaaa 120  
tttagagcaa gcttatgccc atatttcctt acgaacgttc acttgacaaa gacatcctat 180  
taactaagaa aaatgcaccc atatacaatc aaggtagctt cattacctag attatttaca 240  
tgtacttcca aggtgtatgt ggtatttaca tcacacacgc ctccttggct aaattttacat 300  
acatgcatac tcaaagcatt tcgnggtacc aaaaattgca catgcgctca tcttgggtatt 360  
tctaatacct atacatatat aaacttcatg atgaatcttg actaccta 408

<210> 4159

<211> 380

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4159

agcttgagat gaggaagtgt aaaanggtga acttcctgct tttattcggt gaccacagag 60  
tggtacctgg agatatgtcg cgggggtcag gagaccttgn gaacgtcagg tgggggtgcta 120  
ttgccccaaa ccaagcttga ccaatcccga cccaaccggg gcatagtcgg tcagtgagaa 180  
cctgtgatgt acctaaacag gcgagctcct ggcagtcaac agataaaagg aacaaaaacc 240  
acaaagcaag gaggcttgtg gtggctggcc agctgtgaat tttgtgtgat atatgggttg 300  
tggcctctgg taatcgatta ccaagggtgg gtaatcgatt acaacgctta aaaatgaaga 360  
caggaggcta agatgggtctc 380

<210> 4160

<211> 422

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4160

tgctaatta acctganatt gagagnaaat gattattaaa cacacaaaat aaaaatacta 60  
agtattttatt acctatactt aacagaaaat acttataacc ttacaaaata accataaatt 120



gggagagttt gatacaattt atataagttt tatacacaaa agttagtcac tttcaccaac 180  
 taacagttgc cccaaattta cagttttgct tgtcctcaag caaaaagaga acaactcact 240  
 tgtcctcaag tgacaatgac atgcagtgat tatgtacgaa ggtgtatgct acaaagtgac 300  
 taattgcatg ataagagaat ggagtaaaat gccctcaaca cttgtctttc acaacagtta 360  
 tctatagaca agaatanat gtaacctgga cagatagatg aagntaggca taagacagat 420  
 at 422

<210> 4161  
 <211> 475  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4161

agctntagca acaacatgct catctccaat gactaaagcc acgacctctc caacgatgga 60  
 agagaatgta gcattcaaaa atctgcaatt ggatgagttg atggaaatgc tcagacaata 120  
 aaagatagtg gtcaaggagc aacacaaatt gattgcagat ttgtgaacgg gaaaagaaga 180  
 tatgtagaac aaacatttga aagctatcaa atatgaagta gattcgaagg caaagaanaa 240  
 gcatagcaaa aataagatga gcaagttgaa atcacaaatt ccattgaagt ctatgaaaat 300  
 agagtctcca atcactgtca tcacgaaagt agaaggagaa gtggattatg atgaaatcat 360  
 tcctttcaat atgccattct ccaagcgctt aataaaaatt taggttccaa aacaattatg 420  
 gcaacttccg acagtggtt tgtacaatgg atctactaat ccgaacgatt attta 475

<210> 4162  
 <211> 463  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4162

tccatcaagt ggtaatcaga gcacaagagc ttcaagtagg tgctcctnta aacctccatt 60  
 aatttttttc tttaccttct cttccattgt tgtttcttca tttttctcca tgtatctctt 120  
 cacatgtctt gttctaaata ttgttaacat gattcttttag agtttccacc gattaaactt 180  
 gctatagaag ttagatttga ttttctatgg ttcaaatttc ttgttcttag ttcttgaacc 240

atgaattgtg ttgagtttag gttcctttga gttttgtctt gttatttttt gtggctgaaa 300  
 cctaaacccat aaaattctta caaaaatatt aaagtagaag aaaacctcaa aaatctagag 360  
 tgacttggtc acctattgta gttttgtcat agaagtcacg tctagtcacg aaacttggtc 420  
 cataagattt cttatgttgt gctgagattt attttcttgg ttc 463

<210> 4163  
 <211> 478  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4163

tgcagcttgg caattacccat gattacagtt ggaggatata aagggtttctc ttcaccaaag 60  
 aagttgacac ttgcattaca cctctgcaca gcagcttgac caatgatgac ctgcataaat 120  
 gatcagcctt agcccctacc acaacaacaa cttgaaggcc acaaggcaat taacacagaa 180  
 atcttattct tacattaata agaaaaatgt tactatcaat ccactctcta acaccatgtt 240  
 gaacgtactt tttttattgg ttcaaaccga ataaatttta taaatctcgc atcatgattc 300  
 tctctcttaa tttgtaggtt ttaataaatt ttaaataatc atgttcttaa cagtcttgca 360  
 gtaatactat aaagggttaac catcaagcta gtcataagc ctgtcaaaca tcaacaaagg 420  
 aaattggaac tactatgggtt tattgtatgt accaatctct acgaagaana actatata 478

<210> 4164  
 <211> 470  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4164

tctcatccat ctcccaagat ggtccattga agaaaanaat gaagggaag aacaacaaaa 60  
 atgaagacaa agggagtatt gtcaatctgt ttctcggatt caagagtttg ttattggcaa 120  
 gtattgactt ttaactaag gaaaaaacta tttttcttct gtgttctata aatgactgac 180  
 aacatcatga gaaaatacaa gattattaga ttatacacca ctcaagatgc ttatgactca 240  
 tgctgttat tttagagcta cacttaaaaa cacaactatt tgcagtttac caagtaacat 300  
 gtgtgtgtaa ttaagagttg aaacttacia cagcaactac ttgttcttct tctggaagat 360

cttcaacaaa aacagctccc ttctcaggag ttttcacaac ttcattcagct gtacccatca 420  
tcattagctn ttgaccttg anaagaagat tatgtagatc aattaaatga 470

<210> 4165  
<211> 471  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4165

agcttgaacc ttgagtcttg attcttgaaa tcaaatttcc tcttgaacct tgaagtgttc 60  
ttaattcaat cttgaacatc ttgaacatct tgattcaatc ttgaacatct tgaacatatt 120  
gaactcattc tttgattatc atgaattgac ctttgagctt tttgtcatca cctttgttat 180  
catcaaaaaca tctttgaatc aatcttgatt catcatgaag ctttgcttct acacatactt 240  
agtaggatca aaagttattg tttatactga ccatgaaccc attaagtacc tgttgaataa 300  
agctgattcc aagcccagat taatcagatg aatcttggtg ctttaagaat ttgatctggt 360  
tatccaagac aagaaaggat ctgaaaatct tgtagctgat cacttatcaa ggtagtcaa 420  
tgaggagggtg actttgaaag agctatagat aanggatgaa tntcctgatg a 471

<210> 4166  
<211> 464  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4166

tagcaacagc cnnnnaacc caattttgtc gaaaccaagt gtcattgatt ctatattacc 60  
aattttgcta gctgttgatg ttgcatcata gttttgctat gtcattctacc tttggtctca 120  
tctctttacc ttacaattca ggcaattcta tcattaccct ttttcaatat atagaattgg 180  
caacatgcaa acatatctaa tccaggaaat tccaccacta atagtcagcc tataatccat 240  
aaccaatgaa gtcccccatc tccaatttat tccatcttct aattttattg tagtttctgc 300  
agatttaaaa taagcgtttg gttcttcggt ttaacataaa tctattgttt agtttataat 360  
tcaccaatc ctgcctttag tcattttcaa catgcagaac tatcaacatg caaagagatc 420  
tgattatata aaagccagga tcaacagaaa acgtattatg caac 464

<210> 4167  
 <211> 456  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4167

agctntggag tttccaagtg ccaattcgtc ctcttcttta gtccagtctt cttctggcctt 60  
 caattcatca gtgggctttc cttctgtgtc cagcatcttg ngatgttccc agcctatgat 120  
 gacagctttc caggttctgc tatccactga tttgaggaag gccaccattc ttgctttcca 180  
 gtattcatag ttgcttccat caagaattgg tggctgttcc actggtcctc cttctttctc 240  
 catgttcac agaatattat tccccagatc tcaactctgtg atttcgagtg tttgctctga 300  
 taccaattga aattctgata ccacgggaca gatgtcgtac aggatgtcac gacatcacgc 360  
 ttcataacat gcagattgta tgtgtccgta tgaacagact acacaagtna ataacacaag 420  
 agaattgtaa cccagtcggt gcacctcacc tacatt 456

<210> 4168  
 <211> 452  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4168

tgtaatcgat tacacatata ctgtaatcga ttaccagagc agattntcag aaaatattct 60  
 caacagtcac atcttttatg tggttcttga atggctatca aaggcctata tatatgtgac 120  
 ttaagacacg aatttgctaa gagtttttca gaacaaaaag gtcttatacct cttaaaaagc 180  
 aaatcgtttt atcctcttac aaattccttg gccaaattac ttgtgattca ataaggaatt 240  
 atttgagtac tcaaattggt caatctatct ctttcaagag agatttcttc ttctcttctt 300  
 cttcattctg aaaagggatt aagagaccga gggctctctg ttgtgaaaga attctaaca 360  
 caaaggaagg gttgtccttg tgtgtttaga acttgtaaaa ggaatttaca agatagtgga 420  
 actctcaagc gggttgcttg gggactggac gt 452

<210> 4169  
 <211> 463

<212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4169  
  
 agcttgtatc ttcattgcaa atacttttct ccaactntcc tttatatagt tggattgtgc 60  
 agaaaaaggc aaaaaaaaga aaagtagcgt taaacttttg cttttaataa atatttttaa 120  
 ttttaataaaa ttttaaaata caaagtgaca aattatcata aatttaattct tgcaatattt 180  
 tatgttttct taataaatgt tnttatatat aattctgttc atataaaaaat aaagaaatcg 240  
 ttctttaatt tattcattcc atttcaaaat tatactctca atcaaaattt tggagaaata 300  
 atattaatat tttattttta atttattttc ttgaaaaatc tcaattacta attaaattta 360  
 tcaaaattca tataattata tatacaattt ataaaaataa aaaatatgtt aggaagttcc 420  
 acatcatatg cctcagttct tgagggtaca gtttatatat cta 463

<210> 4170  
 <211> 148  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4170  
  
 gcttgctgct cgagccatca aatgtgtttt ccttggatat tctatattac aaaaaggtta 60  
 ccgatgctac tctcctattc acaatcgcta ttatatctct gcagacgcaa ctttttttga 120  
 acgaaaacca taccttgctc ctttcatg 148

<210> 4171  
 <211> 393  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4171  
  
 agcttatgca tgganaatgt aattatgaaa ttgagatgcc cgaagaaaca ccatttccta 60  
 gttaaccatg cattatgtac catgttcaat tattttgttt ttaagtgaac cgggtttatg 120  
 atcccaacat ggttggctcc taacacatga aactaagaat gtagcgtgaa gtttcacgct 180  
 tcccccttct ttgtttttgt tttgtagagg aaaacgcaag gatgagcata catgataaca 240  
 aatggtatgc gattctgcag atcaaaaagt ttgctgaacg catatgcatg atgatgccat 300

gactcatgca aaatgtgagg ctggaatatg ataacggact aatgcaggat atgttcatta 360  
 tgatgttatg aacagatgct tatgcatga tat 393

<210> 4172  
 <211> 455  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4172

ntgcacgtat cagtcaagtg tatggaccat atcgtagcca aagtgctcat cgataatggt 60  
 tccagtttaa acgtgatgcc taagagcact ttggagaaat taccattcaa tgcctccac 120  
 ttaaagccga gttcaatggt ggttcgtgcc ttcgacgaca cccgccgaga ggtagggga 180  
 gagatcgatc tccagttaca gataggccct cacacctgtc aagttacttt ccaaataatg 240  
 gatattaacc cccctacag ctgtctgttg gggcgctcgt ggatccactc agtgggagtt 300  
 gttccctcta cactccacca aaagttgaaa ttcgtagtgg aagggcatct ggtcatcgta 360  
 tcaggcgagg aagacatctt ggtgagctgc ccactctcta tgccttatgt ggaagccgca 420  
 naggagtcac tagaaaccgc tttccagtct ttgga 455

<210> 4173  
 <211> 469  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4173

agctggcttg tggngcttct acggaggctg gatcttgagc ttcaatgagg tcctttaatg 60  
 gtgattntcc accatggaga tgcagcggaa gacaaatgag aagaggtgag aggaggcgcc 120  
 atccactatg gaataagcca tggaagaaag agcttcacca ccaagatgag ccttggataa 180  
 gaagcttgga gaggatgctt caatggagga aaagaaagag ggagagaaaag agagaggggg 240  
 gagcatgaaa ttgaaggaat aaaagagga gagaagtga aatttgaagt atgtctcaca 300  
 agactctcat tcatcaaagn tacaacaagt gtcacacatg cttctattta tagactaggt 360  
 agcttccttg agaagcttct ttgagaaaac tttcttgaga agcttccttg agagaacttc 420  
 ctcgagaagc tagagcttag ctacacacc catataatag ctaactca 469

<210> 4174  
 <211> 444  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4174

tctagcaact tgttgattga cattaatttc aatccacaga tcagagaagg aataagaaca 60  
 tgaacagaaa gaagcttgca gggattctag caggacttat tgcattcggt ataggactaa 120  
 caattcttgt gtgggccact tcctcattta taaaaaggat gaatctaggc aagccagggtg 180  
 aaaatttata agtgaacttt taatgatata ctcttgatag ttttatattc taatgaatac 240  
 ataattatat tgacataaaa gaagtattct tcaattctga agtttatttt ctatttcacg 300  
 tatatccctc taaatagtta acattataac ctccaatata ttaattatga gaaattcatg 360  
 tctcccacaa aatcagaaat tataaaaaag ctaattcact ggaagcacat ganagagatg 420  
 gaagagaatg acatacaaac aata 444

<210> 4175  
 <211> 416  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4175

agcttgatac acgcagagac taacgtcgtc ttttgcggcc ttcgtcaatc gcggccgaca 60  
 agcccgttga cagcagaga tttatgtcat ctccgcgct tacaagatct gtcatactga 120  
 gctttgagtc acgtgacgg gcggaaatac ccgagtggct atccgtataa actttttgtt 180  
 gtatgtaaga cgaaaagcct ggtagcacgc agagactaac gtcgtcttcg gcgcccttag 240  
 tcaatcgcg gcgacaagcc cgtttacacg cggagattta cgtcatcttc catgctcaca 300  
 agatctgtca tactgacttt tgagtcacgc tgacggggcg aaatacccg gtgtgtatac 360  
 gtataaactt tttgctgtct gtaagacgaa gagcctgata gcacgcagag actaac 416

<210> 4176  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 4176

nttcgtctaa cagaatgcaa caagtttata cggataacca ctcggttatt tccgcccgtc 60  
aacgtgactc anaagtcagt atgacagatc ttgtgagcgc ggaagataac gtaaattctcc 120  
acgtgtcaac gggcttgtca gccgcgattg acgataggcg cataagacga cgttagtctc 180  
tgcattgctat caggctcttc gtcatacaga caagcaaaaa gttatacggg taaccactcg 240  
ggatatttccg cccgtcagcg tgactcanaa gtcagtatga cagatcttgt gagcgcggaa 300  
gatgacgtaa atctccgcat gtcaacgggc ttgtcggccg cgattgacga aaggcgcaga 360  
agacgacgtt agtctctgcg tgctatcang cttttcgact tacagacagc 410

<210> 4177  
<211> 437  
<212> DNA  
<213> Glycine max

<400> 4177  
agcttaagaa catgacacca aaagtaaatt cattaacttc aaaagattga aagaagtgac 60  
tgcagaatcc aacatttaaa aataaataaa taactgattg tgagataaca atttttgatc 120  
ttttcaaagg tagatgctac cagcacgcta taaagaggca tattgaagcc cgcatctag 180  
atttcatttc cttaaattata aaattttcaa ttattttaaaa aaaaaggaaa gaaagaccaa 240  
agactgcata agaaagaatc ataaagacat aaagaagtac attttcaaaa ggactgtcac 300  
ctttagtaga tcttccaacc ctttgtcatt tcttcaatg ataaatgttt gaacaggaat 360  
tcttcacga ggtaagtcgg ttatctgtga tgcaaggcaa agttgaaagc atttgcaaaa 420  
gaaaatgatt tcacaca 437

<210> 4178  
<211> 431  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4178

tcatgatgat gaatcaagtt gattcaagaa gttntgataa tgacaaagat gttgacaaaa 60  
agcccaaaga atgatttcaa gattaaatca agaacaaatt caagaatcaa gagaagtttg 120



atttcaagat tcaagaaaag atgaattcaa gttccaagag aagaaatcaa gaagacttca 180  
 caagggaagt attgaaaaga ttttttcaga aaacaaacat agcatagttt tgtttttcaa 240  
 aagagttttt actctccagt aatcgattac cagtttcctg taatcaatta ctagtggcaa 300  
 agtttgattt caaaatgggtg taatcgatta caagatattg gtaattgatt accagtgcac 360  
 ctgaacgttg gaattcaa atcaattgtga agagttacat cctttcataa aaagctttgt 420  
 gtaatcgatt a 431

<210> 4179  
 <211> 415  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4179

agcttgcttc ccagctcgcc caggcgagca aggttgcttc ctccaaaagc aacaaccttc 60  
 tggaggaatc ttctggaggg cccaagtggg gctgggtgct atttgcaccc ccatttttac 120  
 taaatacatc ccctgcctt cttttttttg tgattctttt ttcgtaatgt tacgaaactt 180  
 tacgaatttc gtaacgatac ttatttttct tccgcaaggt tacgaatcct tacggattat 240  
 gtatttactc ttttttagct ttcgaagaag ttacggaaac ttaaagattg cgcaaaaaca 300  
 cctttnttcg acttccgcca cattacggaa tttcacggat cgcgcaagcc tgcttccttt 360  
 agatttctga gacgtctcgg gacttcattt attgtgcaac aaaggacgcc aagta 415

<210> 4180  
 <211> 460  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4180

tgtaagtctc cagacgacga gagtaaaaac ctgcaaaatt tttgaaaata atcagaatcg 60  
 gacgaccaac atcatccaga taccgtcgaa tttgttcacc tcgattgatg aaaggagcgg 120  
 atgatcataa ggtatctctg cctgccacct aacttgctgt ccctggatga caaaagggtgc 180  
 ggaagacgat gttattctct gtatgtcaac gggctcgttt gccctgggtt aacgaaaggt 240  
 gcggataacc atacagtatc cccgcatgtc acctgacttc atgggtcagg atgacaaaag 300

gtgcagaaca cgatgttagt ctctgcgcgt caacgagctc gtttgcccct ggttgacgaa 360  
 aggtgtggat aaccatgcgg tcccccgca tgtcattgga cttggcatct ctagatgaca 420  
 taaggtgcan aagacgacct tagtctctac gcgttaacgg 460

<210> 4181  
 <211> 348  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4181

agcttgccga cagtagtaat ggcggattgc atgtaaataa cagacccgca ccggatattg 60  
 ttntgaaacg gacctctct cgtaaattgg ttctaaaagg aaccccatat agtaaatttg 120  
 ccaagaaatt aatgctgtac ccataaaata attttttaaa atgaatacta atgttatacg 180  
 agataataaa aactgatatt aattctatga ttttattttt taatattata gtatcgacca 240  
 tgaataaatt atataatatt tttgaaaata tatatacgcg taaagaataa ttataatttg 300  
 ctacaatata agcattctga atccttttat catgagatta tatatttt 348

<210> 4182  
 <211> 354  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4182

tatgaagctt gtctatgac tcttactaag tctggttatt tggatgtagt agtggctcat 60  
 tttataatga actcaccctt gcgattatgc atcgtgtggn tgatacctgt gatgatcgcg 120  
 aaccttggtc atgggagcac aatgacaaca gcaagggtgca ggaagtgaga ctctgctgag 180  
 gagccgtcga gtcgacgtga tgacgctggg attattttgn gagagaggcg tatttcgctg 240  
 atcaactcct ccatagtagg ctcatgattc ccttcgctga actatagatg taaagctcat 300  
 atgttggaatt atatgtgaac acattttaat tttcattatg tgtgtgacgt atac 354

<210> 4183  
 <211> 430  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
<400> 4183

agctatatattg aaaccattnt cttcaggcaa tggagctntt acatgctagt cattcattnt 60  
ttccacccga cgttttaaatt tgggcttcaa agattcaagc tcatccaaca cagctcgtga 120  
tctctataac ggaaaaatga tagaaaagaa gaaaatgacc acatatcaaa tataacaaaa 180  
tcaaataaaa gaataaaaca aacacacaca aaactatcat ataaagtggc atggaagttt 240  
ctcgcttata tgctgctctt tcattgggca gngaagcttg ataatctcga tgatatggta 300  
tagtttcaga aatcaaactt taagaaaaaa taccaatagt tggcacagtg aggaaaaaat 360  
gaagatgcc a tactcaattt aattgcnhnc tgacgagtcc accatagaga aaatccatta 420  
cgctttcata 430

<210> 4184  
<211> 399  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4184

tagaaacatc ttcaaatttg tctaaatatt attacaactc ataaccaatc catattcaaa 60  
acgacaaaag cttccaaaga gtcataaca ttntaagttc gttctcaata tcattctagc 120  
tcggaaccaa tacatattca aaacaacaaa gtatttcaaa tcatcaaaac agaaaatagt 180  
tccaaatgaa ccaagtttaa taaaaatcat catcttcaag gcgggagatt gcaacagaag 240  
taacgtcagt tatcaatggg tctgtcggtt cacctatatt gaaaaataaa agttagaata 300  
taaataattta acttgacaaa attaatcaaa tctttaaaaa gaataccttc atcatcaaac 360  
tccatttcag tgagtaaaat agcattttca tttccacaa 399

<210> 4185  
<211> 472  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4185

agctngaagt gagaaagtgt ggaagagtca gtcttcctac ttttatttgt tgaccacaga 60  
gtggtacctg gagatatgtc gcgnggtca ggagaccttg gggacgtcag gtgggggtgct 120

actgcccaaa accaagcttg atcaatcccg acccaacccg ggcatagtta gtcagtgaga 180  
 acctgtgacg tacctaaaca ggcgagctcc cggaagtcaa ccaataaaag aataaagacc 240  
 acaaagcaag gaggcttgtg tgggtggctgg ccagctatgg atcttgagtg atatctggaa 300  
 tatggcctct agtaatcgat taccaagggt gtgtaatcga ttacaaggct tagaaatgga 360  
 tacaggaagt tgagatggcc tctgataatc gattaccaag ggggtgtaatc gattaccagg 420  
 cttaaaaatg gaaatgggat gttgaggtgg cctctggtaa tcaattacca gt 472

<210> 4186  
 <211> 456  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4186

ttttgtcatc acctaaanna accatthtaaa aggtccaacg tcttgaaatg gtcccttttt 60  
 cttttatttg ttagacatgg atttaaaaag cttaaaaaaa acaacacata gctntgtcac 120  
 ctctttcaaa aaaccaagag atcattaatg gtccaatgcc ttaatgtttt ctctcctttc 180  
 aaaagaattg aaagatcgtt tagtgatcca acgccttata atgacctttc attcaacata 240  
 aatatatctt gcaaaaaaag gataaagaca acttaaccaa cgttcaattc tcaaagaact 300  
 acgtaggtct gatttcctta tcacaattga ggaatacgta ggagcaaggg aacaccctt 360  
 gtcgaccaca aaaagataaa aaatataaaa aggcataaaa agacataaga atgtaaaaaa 420  
 ggggaagata aatcaaaatg aagtcattt cgacac 456

<210> 4187  
 <211> 467  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4187

agctntagca caatggcaag gttactttct tatgagttac taattcaatt cttaaccccc 60  
 actatgtaag agccttgtcc attgggtcac ctctttttta ttttgtaaca tttatattaa 120  
 taaagcaaag tatgatacat agtaggaaca caataatata caaaagttaa ataatatatt 180  
 ttatcgctca atatataatt cgctgataaa tgaatccttg aacgatgaat atataaaatt 240

tagtccctaa aagtataaat agtgtgaaaa gtaagtaatc gacaacgtga ccatgctgat 300  
tagatttgat gaaaatgtca acaagataca acgtaaatgt taatcattnt ttggtggaca 360  
aaaaatgtca atattttotta ttgaagataa tatcagtaat ttgttattta cctaaatgtc 420  
aatacatttc attggatcaa aatatcaata cgttatcatt attggac 467

<210> 4188  
<211> 468  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4188

tcagggtcat angttttaag gtttcactca tcaataattg atgtgtggng agcttagcaa 60  
tggcgtccgc caagtgattt gaagaagcct tcaacctggt tgattccgcc attgaagaac 120  
aacgagagca ccaatgttat tccgccattg aagaacaacg agagcaccaa tgtaggaaa 180  
ggcagaggaa agggggatag ggaaagggtc tggacttcta gggacagtac ctccaaagca 240  
caaacttggg taaggtattt ctcatatctg ccctattaca taggagtctt tataaagtag 300  
tgattcctat aacagaattt gtattcttgt gacaacatgg atcttaacag ataatagaat 360  
caatggtaaa tgacacacaa tgtgaacact accgcactaa tgtcagctaa gcactctctc 420  
cttcttcttc tcataagaag tgaagactag aatattattt attgacta 468

<210> 4189  
<211> 447  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4189

agctntagat agcttggtgt aatcgattac gacaaccctg taatcgatta aaacagagag 60  
ttgtgcctct tgaagaaact cttctaactt ataaactttt cttcacacta atcatgatga 120  
tgcatgatgc aatacaaata tcaaattgtac taagatgcaa caaccaagat aacaaccaat 180  
acaaatgccg ctcaagggat ttaggcattg aaaagtgaag actttcttcaa gcttttcttt 240  
gagcttcaag ctttagcctt taggttggtc accatgttgc tcttctatc tctaactctg 300  
cactccattc catcccacca tgtttgctct taaccacgaa aaacgacttt gttatccttt 360

gtgtagacca agcaatgaag tacataaaat ttngnataaa tataacttgga cacctactta 420  
gagagagaga gagagagaga gagagag 447

<210> 4190  
<211> 452  
<212> DNA  
<213> Glycine max

<400> 4190

cctatcgccc ttagactaat ggctagattg aacggaccat tcagtcgctg gaggaccttt 60  
tgagggcatg tgtcttagaa caaaagagga gttgggagag ttaaagacta ctcaaagtag 120  
gcagaaaaac tatcaggctg ctcaagaaaa actgagaagg tcaagttaat ccaagaaagg 180  
ctaaagactg ctcaaagtac gcagaagagc tatcatgaca agaggaggaa agacctgaaa 240  
tttgagattg gtgatcatgt attcttgaga gtcattccat tgattgcgtt ggtcaagcat 300  
tgaaatccca aaaactcata cctcgtttta tcaacccttg ttaaattctc aacagagtca 360  
gtcctacggc ataccatatt gcattacctc tgtctctgta caatcttgac aatatctttc 420  
atgtgtctca actcagtaat tatatctgtg at 452

<210> 4191  
<211> 446  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4191

agcttgaacc ttgagtcttg attcttgaaa tcaaatttcc tcttgaacct tgaagtgttc 60  
ttaattcaat cttgaacatc ttgaacatcc tgattcaatc ttgaacatct tgaacatatt 120  
gaactcattc tttgattatc atgaattgac ctttgagctt tntgtcatca cttttgttat 180  
catcaaaaca tctttgaatc aatcttgatt catcatgaag ctttgcttct acacatactt 240  
agtaggatca aaagttattg tttatactga ccatgaaccc attaagtacc tgttgaataa 300  
agctgattcc aagcccagat taatcagatg aattttgtcg ctttaagaat ttgatctggg 360  
tatccaagac aagaaaggat ctgaaaatct tgtagctgat cacttatcaa ggtagtcaa 420  
tgaggaggtg actttganag agctag 446

<210> 4192  
 <211> 465  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4192

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 aattntgcta gctgttgatg ttgcatcata gttttgctat gtcacttacc tttggtctca 120  
 tctctttacc ttacaattca ggcaattcta tcattaccct ttttcaatat atagaattgg 180  
 caacatgcaa acatatctaa tccaggaaat tccaccacta atagtcagcc tataatccat 240  
 aaccaatgaa gtcccccatc tccaatttat tccatcttct aattttattg tagtttctgc 300  
 agatttaaaa taagcgtttg gttcttcgtt ttaacataaa tctattgttt agtttataat 360  
 tcaccaatt ctgccttttag tcattttcaa catgcagaac tatcaacatg canagagatc 420  
 tgattataca aaagccagga tcaacagana acgtattatg caaca 465

<210> 4193  
 <211> 469  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4193

agcggttgtgt ggggagattc acataatcat cgtaagagtc atagagtggc tcggaaggag 60  
 ctatgtatgc ccaagggcac tggaggcttg tgctttaag aatccataaa tttcaattta 120  
 accttcttga tgaagagcgg gcggagctta tgttcgaata cgatgcgttg cgggtcacia 180  
 taatcagaga aaagtatcac tgtggagaat ctttgatccc agatattgat tgtaataggc 240  
 ttgagactaa tttctggttg ggcctttgta anacctggcc tgaggtacac aagaaccttt 300  
 gctgaaatac tgtggatggg aacaatgtta gagtttctgg gagagcggtt ggcgtccttc 360  
 tcaacgtagg ctttaatttg gacaaagcaa ttttcctcta gacgtatgga gcatatgaat 420  
 taatatgtgc gtgagtatgt tgataatcat gggaactata acttaccgc 469

<210> 4194  
 <211> 407  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4194

tcctaaatgg catatctcat ttcctcaagc tntggtggaa actctccctc ttcataattt 60  
tgatcataac cccatgttat taagctactt taaatctcat tccaagaagt tgagatcctt 120  
tcaatttcaa ggaacttggga tgtcccatcc agattactca ccactagttc gaaacacttg 180  
gcaagatgca aaggggtcta tcccttataa actgcgtcgt attcagatga aatccaagga 240  
gtttaatgag aaggtgtttc ggaatatttt tcgtaacaag aagaagcttg aatcccatat 300  
taaaggtgtt caccaacagc ttgagtggag gcaggatcat tctcttatta tgttggaaaa 360  
gatcttcaaa gtcaatataa taatatccta gcccaagagg agttatt 407

<210> 4195

<211> 383

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4195

agctagagcc tacnagtcca aaggaataat agttgttctt cacagagaga ctctaattgtt 60  
tgtcatatta ctggcgcagt attaactatg ggcttaacat tctacagggc attcaaaatg 120  
agaacaaata cttacaaaaa ccactgaagg caatttaata ttagaagtta caagataaa 180  
cctttctcca tcatattttg cggagagata ttgcattact actggtatgc atctagtttc 240  
tttaccttgt catgagatgg gcaactgcgga aaagggcgtc taaaataaat atgacatgac 300  
cccccttttg cccattgacc tgcattgtat tagattattt tcaaggatag accttattgg 360  
tggagggcat ttgtaatccc tgc 383

<210> 4196

<211> 459

<212> DNA

<213> Glycine max

<400> 4196

gacactatga atactcagct tgtaggctag atatgaactg ttggactctg ttaacactgt 60  
gtcgctgtgt gagcattctg gacatacacg cacactttct gattcatgct cttatgcaca 120



cacacacaga gagattcggt ctctcgtcag aaacactacg catacgaaca ggcagacgct 180  
cacgctgaga acctgtaaca cagacacttg tcagactcac gcacttacac agacaccaca 240  
gactgactat gacctattca gagacaagcg cactcccaga tacacgcact ctgatagact 300  
tagatggcag aacttttcac agaagcacac acacccacag attcactgtc acacagttgc 360  
tgacacacag agaccatgcg ctcattccaca cttgtagaca cacacatata cacacgcaca 420  
ctcacactga gaactagccc cagacacaca cacacgctg 459

<210> 4197  
<211> 376  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4197

agctntgagc anattcanac gacaataacc tttttactcg gaagtcggat tgagtcccgt 60  
tatatattca gacgctcgaa attgaatggt gaagctctga gcaaattcaa acgacaataa 120  
ccttcttact cagatgtcgg atagagaccc gtaatatatt gagacgctcg aaatggaata 180  
ccgaagctct gagcaaagtc aaacgacaat aactttttac tcggatgttc gattgagccc 240  
cgtaatatat cgaaacgctc gaaattgaat gctgaagctc tgagcaaact caaacgacaa 300  
taaattcttta ctgggatggc cgattgagtc tcgtaatata tcgagaagct cgaaatggaa 360  
taccaaagct ctgagc 376

<210> 4198  
<211> 451  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4198

gtgaagctcc tgttttagct ttacccgatt ntactcaacc attngaagtt gaatgtgatg 60  
ctagtggagt tggcattggg gctgttttga tacaaaacaa aaggcctata gcttatttct 120  
cggagaaatt gggaggagcc agattgaact attgcaccta tgacaaagag ttctatgcca 180  
ttgtgagagc tcttgatcat tggaatcatt atttgcgttc taatcacttt atattgcatt 240  
cagatcatga gtcattgaag tatatcaatg ggcagcagaa gttgagtcca aggcattgcta 300

aatgggttga atttcttcaa tcttttaatt tctcttcaaa atacaaggat ggtaagagta 360  
 atgtggtggc tgatgcactc tcaaggaggt atgctttaat ttcaattctt gaaactcgtt 420  
 tacttgggtc tgagactctg aaagattata t 451

<210> 4199  
 <211> 453  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4199

ctgaagcaat ctctgctgct tgaatgcaat ttcagagcca atcccttcaa tagctttgtc 60  
 ccctgggatg ataagagcaa agaaataata aatttggaaa tctcttttgt tagctcacta 120  
 aaaggtgata cttaaaagca aacacttttc aagtttcaaa actgtatata aagaatgtat 180  
 acttacagta ttctttgtca atacattaag tgaatcctca tgaaaccaca atcgactgcg 240  
 cttcccaggt ttctttgttg aactttcacg aattatctct cttcccatgt ctctagtaa 300  
 tggatgcatt ccaagttcgt tgttctttgc aacttttacg aggctacgct ccatgagaac 360  
 tgttattcct atatcagcat gtagtcaca gccatntagt atctctgtaa cataagctct 420  
 atctttacca ataaagagac aacatacatc aag 453

<210> 4200  
 <211> 364  
 <212> DNA  
 <213> Glycine max

<400> 4200

agctcgatgc aatcctaccc tccatgggta ttgtatagaa gactccaaga ggattgagct 60  
 agagctgcta aagaaggcct tggcgttctc atgaacocca aggtagattt ctgagcccat 120  
 gggccatggt tgggtccact cttctttgta aatattagaa tatgtttttc cttcttttgg 180  
 gccttgatt taggccattc tagtagtata ggatttttagc cttgtctttc atggcaattt 240  
 gagtagactt tgtagtaggg acttttattt ttcatgtatt ttggcatggg ggcgagctta 300  
 tctattatag ggagtgcgta actaagccct acctttttta ggaatcttcc caaggaatct 360  
 tctt 364

<210> 4201  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<400> 4201

tactcattga ctataagcct ctcaatcatt ttcttaaaga tgataagttc cctatcccaa 60  
 aggcttcac tttccccacc ttgataagag aatcaaactc attctcaaag aatgatttaa 120  
 aatcaggttc tcggcaactt ggcctaaaac cacataatcg atacaaaaca gcatcctgta 180  
 tgccaaatgc tcaatatcaa tggacaggct tacctttagg cttaaaagta gcttcttctc 240  
 tcttgcagaa agccatgacc aaaatctttg aaccattctt ggaaaacact cttgtctaca 300  
 tagatgacat tctcctttgt tcaaaagata ttgcctctca ctaaaaattg ttgaaccaat 360  
 tctttgaaat agcacaccaa catgggatca tgcttt 396

<210> 4202  
 <211> 326  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4202

agctatgtga aactgccatg ttttgatgag ttatacatat ccattctgtt gtacgcgttt 60  
 tgtgatgatg attgcatgt ttatcttctg acaatactga tggaaatctg ttagagacga 120  
 aggggtcaaac taacctaagg ttacaaagtg agaatgtgat gttatgagtg gaaaaagagt 180  
 gagactctga gagttggaag gttaagtctg aattctgtgg taaatggagg ttaaaatgag 240  
 ttaatcctag cttganatgt catttaagac atgtgagaaa ggtaggctg agctacagag 300  
 attatcactt gaccaaagtg aacaaa 326

<210> 4203  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4203

tgtagaattc accccaattc tgggtgtccta tgttgaattg ctcccatatc tactcgataa 60  
 ttcaatgggt gccataacct caaccaaggt tctcaacct ccatttttcc gaggatacga 120

ctcgaacgca acatgtgttt gtcatagagg ggccccaggg aattccattg agcattgtag 180  
gaccttgaag cataaggtgc aaggccta atgatgcgggc ttactgaaat ttgaggagaa 240  
ttgcttgtga atcctgacat tcacaagaga tgccacacat ggngcaattt gaagggttgg 300  
gttagatgtc tctaatagact cattatgatt ttcaagttta ttccattatt gtaaaccata 360  
gttacaattc taaataatat ggatgaattt gacatcgcta tctctcttat cctctca 417

<210> 4204  
<211> 407  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4204

agcttgtctc agtgtttatg cgagacaaag accaacaatgt tagccatcgt cagcaagtag 60  
caagaagaat taaatctagc cacggccccac gagcacatag tgacggacga gtatgcccac 120  
gtgtatgcgg aaaaggaggc tagaggaagg gtgatcgact tgttacatca agaggcaaca 180  
atgtggatgg accgatttgc tcttactttg aatgggagtc aagaacttcc ccgattacta 240  
gccaaggcca aagcaatggc ggacacctac tccgcccccg aggagatcca cggaattctc 300  
agctattgtc agcatatgat agacttaatg gcccatataa ttagaaaccg ctaggaagtt 360  
tgtattgtta ctcagatctt gactagntat aactttctga ataaaat 407

<210> 4205  
<211> 412  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4205

ntngnagaat gcataccctg atcaaaatnt gatgtgtcct cctccagaaa aggttaacac 60  
aaaagggtgca tcgaagaaac tgattaacag aaaccaaggt tcaacaaagc gtgatccatc 120  
ttactaggag tatgtagatg ttttttattc tcagcaaaat agcaattcgt cagtgaagca 180  
tagtgcacat tcttctaagc agcccaatcc aagaaggatc atgcctatct tggatcacat 240  
ttagccattt atccatgact tcattgataa cattgttgat gtccaagcta atggaaacta 300  
tgggtatcgg tcggttgcg gtttattagg tataggtgaa aactcttggt cgttggtccg 360

cacccatctg cttatagaac ttggcaaatt cttagaagac tatatcatat tc 412

<210> 4206  
<211> 301  
<212> DNA  
<213> Glycine max

<400> 4206

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ggaatcacct ataggctctg cactgtaggc tgagtaatca ccactgcttc ttgtgtgaca 120  
taaaaggac tctgcagca ctcaattact gaccttctcg tttgtgagtc ttgacatcaa 180  
gaacaattaa atgcttgatt acaaccaaca tccctataac tgaagtgtga aacaacaact 240  
atcgctcatt aatttccata aattatcatg agaatcatct ctctctatcc ctttcaacac 300  
a 301

<210> 4207  
<211> 437  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4207

tcaccccttg ataatgagga taggagattt gccctggatt cagctaggga ctactttcct 60  
tagcaccctt atgttcaata cgttcgataa ataaatcttn ttcttttgct atatgcatga 120  
gagtttcaat gctagtgtgc acacaaatgt gtgacaccct ctaccccgca catatatttt 180  
aatataggaa taaaaactca catattaatt aacagtattg tttaaattatt cttaaataca 240  
agcctttcaa atgggtaaca ggctcacatt cactttcttc tacatcatat tcaaacttgt 300  
ccatataaat aataaagtca tatcggctca aagaacgcca tctaagtatc atacaattaa 360  
tatagaacc atatccta atgcacatctt atcagagcgt ggtgttcccg tgttctctag 420  
catgaggatc ttcatag 437

<210> 4208  
<211> 477  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
 <400> 4208

agcttgntcc ccatcaaaga taagacaaag tatataacaa gtacactccc cattctgcta 60  
 gctatcatgt ccacagaaat ccataatgt caatagagat tgtaaagtaa taatcatatc 120  
 acaatatcac atgttatttg ctacggccta cgggaaagct cgagcgagca aacttgcttg 180  
 gtgagtaatg ctaactgttt gttgaaaacg cccaagtaat tcattacatt nttacatcac 240  
 ttgacaagga gtttcggatc aatgtctttt gttttgcgtg atagcacgga tgcagatcaa 300  
 cttggacact acttcaaaaa tcaaaacgtg aatgataata accaaataaa taagtggata 360  
 aactctgcaa atgcaggggtg ttgcaaattg catgaagccc aagtactgga cttggaagtt 420  
 tattgttttt cttcaatcaa ttgataacat gagcatccn cttcatctg gagttca 477

<210> 4209  
 <211> 461  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4209

actatgaaac tcagctgata gatttanacc acacctttat ctctatagta ctttataatt 60  
 gaagaataca cattcgttta tttattattt attattttta aatgataaca aaattgaata 120  
 aaagtgagtt tattctttat tcgttgcaag tgtaattttt ttatattgtc aagtaactag 180  
 aaatcatgtt agatattatt tttaagatca ttttataaaa ttcaagaaac ttatttaatc 240  
 tataattgaa taattctgta aattttaaatt aaacttttaa agtaattata aacattcaat 300  
 agataattta acttcaaacc ataattatga atgcctcctt ttcataacta taagatgttt 360  
 tagctntatt tcttatctta naataattga tatntagaa attcanaatt taattaatat 420  
 tttttccaat tatatcctta tttattatct cattattaat g 461

<210> 4210  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4210

agcttatcta acaagatata aaatacatag ctctgtctta ttattgtcta aagcgtttct 60



aagcgatctc ctattttctac atcaaacggt tcagattggg acccactttg catgtctatc 300  
aattcaccat gccatatcca cgtcgtgtaa ttctttctaa tcccatcaca caatagatgc 360  
tcccacatgc cgtccagtag ttgttgtctt ccattcaaac aattgatgca aggacaataa 420  
tgttttccat cttcatccga tcgacctctt aatgaagtaa attaca 466

<210> 4213  
<211> 469  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4213

ggatggagaa tatgggtcca tacttgtcag ccaagtcacc caatgttnta tgaggtgtct 60  
ttgaaccaag caacaatggg aggtgaccaa ttattggcca cgcacctgca actgtgggag 120  
gacctcttc gccactcttc gaggaacgac gacacaaaaa caagtataag aggatcagag 180  
aaacaacacc aactccaatt gttgtggtgt ttagaactaa gtccattntg acttggtttt 240  
gtgttggtgc atgcagatcc tcatcagttt aaataggaac tgcaccgtgc atctgtgtgc 300  
cgttgtagca cctgactaga tcgagtagag atatttagat attntaatat tntagaatat 360  
attcattact tgaattaact aanaaataaa ataatgttgc tgaaatgatg aaataatata 420  
gccaaataaa atcttgatat tntaagatat nntttaattt tatattaca 469

<210> 4214  
<211> 459  
<212> DNA  
<213> Glycine max

<400> 4214

agcttgtaat gaagatgaac ataaacttag gatcacttat ttctggtcag atttcactca 60  
ttgctcaatc caactccttg cggcttggat ttccaacctt gattactgcc ttgtgcaagg 120  
cccaggagt cacctcagat tctcttacct tcgagtcact cagcctagcc attaatgtg 180  
cctatattaa gaagaattgt tggaacctgg atgacctttt tgctactttt ccaaggaccc 240  
aaaaatccag ggctagaaaa tetgaggacc catctctctc tgctccccct acttctgctc 300  
ttccttcacc accagcagct ccaattcttt caggtccctc cacttgagc tcagagcctt 360  
tcatgtttat gctacagagc ctgcaccagg gccagctcct gattatgcat agcttgcagg 420



atgtggccca gcagtggcca gttatgagcc tggaggagt

459

<210> 4215  
<211> 465  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4215

taacgtctnt cacagtanaa ggaccactcc atctctcaat tntaattntc caggaaacaa 60  
cttttagttnt aagttgtaga gcaatacttg ttgtctggga ctaaattctt tgtggaggat 120  
ctttttgtca tggtcctctt tataatccct gaacacttta aacttggagc caaacaggta 180  
atgcctccac atcttaaggg caaaaactac agtagccaac tccagatcaa ggggtgggata 240  
attcctctca tgagtcttga gttgtctaga agaataggcc actccttggc cattttgcat 300  
caacactcct cctaaacgca tctttgatgc atcacaatac acctcaaggn gttctcttgg 360  
gttaggcaaa actagcatgg gagcgggcgt caacttttcc ttaagggttt ggaaactatg 420  
ctcacattag gtatcccaca caaaagcttg acccttacga gttag 465

<210> 4216  
<211> 458  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4216

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acaacaagtt ttccacatcc acaatgcgcg cataaaacca ccatcccctg ttaccacct 120  
ccatctgagc tcacgtactc ccacgtagcc catatcctcg tttctctcaa caccgagtcc 180  
ccatcaatcc tccaagctt ccacaacatc caagcagaac aacattcaaa cagcacaagc 240  
tatcacagcc aagcaaaaca gagcanagcc agaaaactct gctcaacaca ccaacaaaat 300  
cacagctttt ctacttaaa gaccccagta acaattcctt cgatccaatt cgtaaacat 360  
tggatcgact ccaaattttt actggaagtc tatagtacat aagcctacat tgtgacgcgt 420  
gggatctact agaaaacatn cagaactcat tctgcact 458

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<223> unsure at all n locations  
 <400> 4219

gggaattcaa gtaacctcta gttgtctttt tttatttgtg tttgtatata taaataataa 60  
 ataataataa tagttaaaca tcgcctttct tttctcttca cttgaagaca tatcanagtc 120  
 atataggtgg attattatat ttatccgata accacaaaag taggtattaa tatgataaag 180  
 cagaaggaat taattgccaa atcttaatca aagtattgat acgtattaac cccctttcca 240  
 aagcatgttt aagatattgg tgtggaaaac aaaaaacaaa atacatgttt aattcaaaaa 300  
 aataattntg cgacaaaaat aattntgtta aagaattaaa actcatacaa cattntaaac 360  
 ttcaatccaa aaatctacaa aagaagacaa ggngcacaaa ggtagctgtg gctatcagtc 420  
 ttacaaggga tgttcatata aacactgagc ctttctcggg 460

<210> 4220  
 <211> 466  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4220

agcnttgtcc ccaattttct ataaacaggn ggagaagtga agtaganaac ggttcagccc 60  
 cttaggcact tctctctctt tcgaatttgc ttaggaaaat tgtttttgtg aagaaaatcc 120  
 aagccgagge gcttccgtaa cgtttccgtg agtgatttcg cgaaggtttt cgaccgttct 180  
 tcgacgttct tcacgttct tcagtcttca acgggtaagt acctcaaacc aagcttttca 240  
 attcattcta tgtaccctg gtgggtccaaa tttggtttca tgtattttta gtctcgttnt 300  
 catttacttt ttatacccn ctttgacgtg cttaagccat ttatttaagt catttctcgc 360  
 ttaacctana aataacataa atntccaccg atcatttgaa ttgtatcatc cgtaaacttt 420  
 gggtgaaaaa attccgaccg atcggtcgtg ccgcaaccac attgga 466

<210> 4221  
 <211> 449  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4221

tgtaggcgtt ggatcttctt catcaatgga gtcattggct tcttgaagat catggcagcg 60  
 gaatagagaa ggaagaaaga tgattggaga cccacttca aggagatgat gagtcaagaa 120  
 gaagctcacc accacaggaa gccatggata agagcttgaa ggaaggcgaa gatgagtgga 180  
 gggagaggga gagaaggggc acgaaattnt atgcctcaaa tgaggtctga actttgaagt 240  
 gtaattctca aatgatcaaa gttcaaaaaa tgcacacaca tggcctctat ttatagccta 300  
 agtgtcacac aaaattggag agaaatttga atttctattc aaatttcact tgaatttgaa 360  
 attgaatttg tggagccaaa atttcaataa ttatgattaa tgaattttag atatgggtca 420  
 gccactaat ccaagatcaa gtccaagat 449

<210> 4222  
 <211> 355  
 <212> DNA  
 <213> Glycine max

<400> 4222  
 agcttctaag gaagctgtct cattatagct tctcaaggaa gctacctagt ctataaatag 60  
 aagcatgtgt aacactcgtt gtaactttga cgaacgagag tcttgtgaga cacaactcaa 120  
 aggtcaacct ctctcccttt atcttccctc aatttcgcgc tccccctct ctctttctct 180  
 cgctctgtct ttgcctccat tgaagcatcc tctccaagct atcttataca aggctcatct 240  
 tggcggagaa gctctttctt ccatggctta ttccttaatg gatggcgct cctctcacct 300  
 ctttcccttt gtcttccgct gcatctccat gagggacaat caccattaga ggacc 355

<210> 4223  
 <211> 448  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4223

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 gaggataagg gggagagaag atgaactttg agttgtgtct cacaagactc tcattcatca 120  
 aagttacaac aagtgttaca tatacttcta tatataacct aggtagcttc cttgaaaaac 180  
 ttccttgaga agtttctttg agaagcttct ttgagaagtt agagttagc tacacacact 240  
 cttctaataa ctaagctcac ctcttgaga agcttccttg aaaaacttct ttgagaagct 300

tccttgagaa gatttataga gaagttagag cttactaaa cacaccctc taatagttaa 360  
 gtcacctnc ttgagatgag aagctagagc ttaactacac acaactccta taatagctaa 420  
 attcatccca tgccaaaata catgaaaa 448

<210> 4224  
 <211> 390  
 <212> DNA  
 <213> Glycine max

<400> 4224

agcttgctca gattccacat atcctgtgac tgtaaaaca acagctggtt tagtgacgga 60  
 agaatagtcc atagttaagg attcaactat atataggaac gtcaagttgt tgactttgaa 120  
 cttgatagtt tatagtttgg aacgacctat gtctagttaa tggcccagag gctaataatta 180  
 aagacattga ctaaatacagg agtcttaaaa attattattt tttaaataa aacatattct 240  
 cactattttt tttttttact tacgctatcc attttatttg gtcaattctt acttggtcga 300  
 agcaactcatt ggagcatttt attaatgtta tcctctcttt tctcttaaca tcaggcatat 360  
 ataatccata tccttcctcc atattctttc 390

<210> 4225  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4225

nttataanaa gcattttctaa gcataaaact aaaatatggt gtattgagct cttggtattt 60  
 tttttatgat aacattttta attatgagta taattttata attattaaaa gccatcagtt 120  
 tttttttaa taataatttg ttcacatttt gttcaaataa acttaatgta agttctctga 180  
 atttattgca ttctggcgac tgaaattcac aatcaaaact taaagtgtgc tgaataaaag 240  
 tttttcatag atgtaataa gtaaaataat gttcataaa taattaggtg tctaatagaa 300  
 gaataaagtt aatacaactg ttctcgaaat taaagtagaa tcgatacatt cacagatgtg 360  
 tatacataat aatgggtgtg tattcaatac atattgtttt gctttactgt cgaactatgg 420  
 aattccatat acat 434

<210> 4226  
 <211> 417  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4226

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 tgttgaagca cctgatgaca agtctctttt atatgagatt acatatacca tcaactatct 120  
 tatcaaaata tggcaatcct gtagtcatta attctccaat ccttcagtta gggtataata 180  
 tctgaaatgc tagctaggac cagattcttc aactcaaggg gaatatgata atgtggaatt 240  
 cattntaaga atgcttcgtg cattcgtcac tggcatcaca ttattggaat gccgttgatg 300  
 atgccgtaca gtagcataaa ttaactaacg ctagcagaat ttcacgtaat attctaatta 360  
 cacagtttta ccttagntta aatttcaaga gagctctctc tgngttctca agcatat 417

<210> 4227  
 <211> 353  
 <212> DNA  
 <213> Glycine max

<400> 4227

agcttcttat acaaggctca tcttgggtgc gaagactctt cttccatggc ttattcccta 60  
 gaggatggcg cctactctcc cctcttctac tttgtcttcc gctacatctg catggtggaa 120  
 aatcaccatt aaaggacctc attgaagctt aaagatccag cctccataga agccccacaa 180  
 acaaggtgtc catcagtaat gtcttacgca agatataaag gttgaaacat attgaggaag 240  
 aagtggtttc tgttctcaca cccagcatga agacaaccat gagttacagt gggagggaca 300  
 agattgagac tctagagcac gcgacgtttg tgaggccata tgcttactat atg 353

<210> 4228  
 <211> 374  
 <212> DNA  
 <213> Glycine max

<400> 4228

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 atgatgactg aggtgatgaa cataaagctc aaagatcaat cagagaacaa ctcacgtgaa 120

tcaaagaaca tctcatatga atcaagaaca agtcaagagt tcaagataag aatcgagaag 180  
aattcaagac tcaagaagac agtctagagt caagaatcaa gattcaaggt tcaagatctc 240  
gagaatcagg actcacagat tcaagaatag agagaaaact taatcaagat aagtattaga 300  
aagttgttca aaactttgaa tagcacatga gttcttgcaa aaccttttac tagaggttgt 360  
actctctggt aatc 374

<210> 4229  
<211> 330  
<212> DNA  
<213> Glycine max

<400> 4229

agcttgagct ttgaattgag tgtcattgtc agtggcaatg gcgtaaagaa gaccatattt 60  
tcatatgaag ggtttgcattg agaactttctc tacctcatct ggtgaaattt ctcgcaatgg 120  
tcttgcttta atccacttag tgaaataatc aatagcgact aataagaatt tgacctatcc 180  
tgoggctttt gccaatggc ctagtatatc catccccac atggaaaaag ggccagggtcc 240  
tagtatgacc aataagaatg taccctttgg ctcgctcacg tagctcgtcc atgctgctag 300  
ggggtttctt gcataacta tcagggaact 330

<210> 4230  
<211> 334  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4230

cgctctata gctagccatc acaagaagat catattnttc aattgacgtg ttatccacat 60  
cacattctac acggtctcac catgaataaa aagggaaatg gntatttctt ctccttccat 120  
actcaciaac aaacatgatt ntacaagcat caaactcaac ttatgaaaac atgtgcatca 180  
tgaccacaa cagcacatca caatccacaa caatgccttg aagcattctc acctattcca 240  
cgaattggat tcatgcccc ccccatgttt tattgcatgt tatgttatcc ttccttttct 300  
caatattatg cggagtttat catgactcat attc 334

<210> 4231

<211> 471  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4231

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 tttaacctgaa gtaattatca cagcatcaca atcataatct cgttctatctt gcaatcaaaa 120  
 tgttatgctc tattcctaga aacataatgt aaagagtaaa ttcattcagt tcaaattcta 180  
 agagtacttt ccaatcaaaa ttaaaatcca atttcatgaa acttgtgatc aaatagaatc 240  
 aaacattaag aatagaatga aatcaccaat aatgagtata aaatattcat acatatatat 300  
 aatatcaaaa gagatacata aggggtacaaa gattacatcc aatccttttag agaaactaac 360  
 cgatcattgc atagagtaca agatcaacaa gagaaatgat gaaggatgcy atccatgggt 420  
 acaactctgt aacacctggg ctccactntg tgctttcttc ttccttctat g 471

<210> 4232  
 <211> 471  
 <212> DNA  
 <213> Glycine max

<400> 4232

tagccaattc tactgcctgg ggcaaagaca atgggtcaaag tgctggactt cgcgatggag 60  
 ctctggattc aggccagaca caaagccctt gacaatctcc attgataggc aactaaatac 120  
 atgcaactgg aggagctcac caagtacaac cggcagttga ggaatgaagc atccgactca 180  
 aagaaggagt tagaaaggga tgcccaaaaa ggaaaaagaa catgcacgca agactagagg 240  
 acctttctac aactattaca ctccccttaa tgatagccaa tcaaggatct tggaacaagc 300  
 ccttgctact gaatttttca tgatgccaaa gcaggctaac cccccctaag agccaaccac 360  
 tcaaagcatt ttgatacca taggaattgg ggtcattcct cagaagaatg cataacacat 420  
 aaatacaaga ttaaggatct aattaaaaaa acatgcctaa aggatttcaa t 471

<210> 4233  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<400> 4233



agcttatttta aaaaaatata aaataaatag ctgtttctta agattgtcta cagtgttttt 60  
 ttataataaa aaaaaacagt tttctgcttt atttacaagc aaattctatc tggttctcac 120  
 aaaatcactt ttttaacaa cacttttttc ggaatcactt ttttgaagtt taaacaaact 180  
 ggtccataaa caatctcaga aatgaaaagt tcaatccaat tatacaccaa gagagacagc 240  
 ggattagtga atctttttaa caagttacat gcaacacatg tccacagaaa aaaacacaac 300  
 taaattaaac taaataccat tcaactagtg aggaattgat acagctttat tctcaccata 360  
 taattgcagt tgtgtattta gtgatgtttc caataaggta atgagggtga tcagagaagt 420  
 ccacactaga cccgaacaca attt 444

<210> 4234  
 <211> 444  
 <212> DNA  
 <213> Glycine max

<400> 4234

ctcagcttga atgaagtcca acgcagcacg cgtgtcgtta aagttgggaa ggtaggcaa 60  
 tgaaggagat gaacgtggag tgtagtttcc actgtacttt actctagcag aggttgtgga 120  
 gttatcaaag gcaacaccaa caccacttga atatgctctt gcagcacgat agtaatgatt 180  
 aagttcttgg ttggcatgca ataacacatc cattgtttgt cccggtgata tgcaaatgta 240  
 ttcccttgcc aatggcttgg ttaacatacc atcagcacca acaacagtga ggttgtgttt 300  
 tgaaacagag aagaagagaa tgagattcat tgccgcattg acaacacgga gaagataagt 360  
 cctgccttgc tctacatgaa actcgaacgt ttctgaaaat taaaagaaag ttttgtgttt 420  
 agatgagctt aacctcatag atac 444

<210> 4235  
 <211> 471  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4235

agcttgtggt gcacgatggt tccttcaagg agatcttctg ccttccacag ctganagtat 60  
 tatgcttggga accccttggga gaactcattt ccattggatt aaagaactct tggattgagc 120

ccttcctacg aaatctagaa accttggaag taatgagttc ttttagttcc ataaacttgg 180  
taccacacac agtgtctttc tccaatatga cgtatttgga aataagcagc tgcaatagcc 240  
tggttatattt gttcacatcc tcaacagcca caagtttggt tcaactcaaa agaatggaga 300  
taaaatgctg caattcaatt gaagagatag tgtctaagga ggggggtgaa tcacatgagg 360  
atgagatagt atttcagcag ctaaattggt tgaatctttg ctaattacaa aacctcaaaa 420  
gtttctacat agggagttta agttcccatc cttggacaat tgtcaataac c 471

<210> 4236  
<211> 475  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4236

tctaagctta cctacgctng agtgaatggg agtaagccaa gatcttaaag tggagatgaa 60  
ggaatgtaga agctctttgt cttggagtct cgaaagcaag aaaatgagaa gataaatgac 120  
aattgttaat gaaaatcggt aatagttctt taaaagagtt tatacctatt aaacactaat 180  
ttttactagt gattttatta actaataaat atttaagaga ttactttaat tattaataaa 240  
aataataata ataatttcaa taataacgac cattataata actttttata taaaagattt 300  
atgtaataat ttcaataaaa atagcaattc ttgatgataa taattttgat gataaattca 360  
ataatgcatt cgataacaat gttaatagta atttcaatag cactaaacaa tgaagattga 420  
ataaaaataa tgtttagaac agaaatggag attaacaaga gatgtgagtt tatag 475

<210> 4237  
<211> 470  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4237

agctntaagc atacatgaaa tacaggcgcc aatcttggtt tctatccaaa ctcacgcact 60  
tgcatttgtt gattctaaac agtaattaat gttggttctt ttatgtatcg aaactgttag 120  
gagagagaaa acacctcacc acttgaagga ttatgtttaa gggattttgg cacaagttca 180  
tttatttggt agcgcagtag tgcattagga taattctggt agtgttccct ctgcttgcc 240

agaggattct gttggtggct gttgtcctat agtgagcaca tataactata tatatgcagn 300  
 gtattgacag aagggaaata agaagaatat aagcaaagtt ttctctctat gtcttaagct 360  
 tttctactct cttctctctg cttctgcatt ctgcatttct gcttctattc aagttcttaa 420  
 catttggggc tttcattgag ctcccatggc ggaacctgac cgatggaacc 470

<210> 4238  
 <211> 365  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4238

ntgtccgcaa atccctcatg taagactagg cctaaactaa acagcattat tgtaacagca 60  
 taattaaaac caaaacttaa ctgcgagaat cctcatgtaa agctaagttt caatcctgct 120  
 tcaatcaaat tctaaggcaa cagtacattt ctgatgcta aagtcaccta actgtgcaca 180  
 caaatgggtg atcagaccca aaacatacaa atattaagca ttgaaggaag cattgaacat 240  
 taaaacataa tcaattagat attaggtatt tacatcagtt ggtcattaga aatccccaac 300  
 tagggtgggt agccagccac tacaagaaa cctaaccat aaatgagatt aaaagcagag 360  
 aatga 365

<210> 4239  
 <211> 367  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4239

tctgagtcac ctgccgcatg caagcttggc ctcttgaaa ttctttgcac tagtcactct 60  
 tacagttgtg acgtttgaat aaatctacag aaacaagtca cttatagaat tgtgacttct 120  
 ggaaatatat tctgtgagat tagtcactgg tgatcgatta ccattaaggt gtgatcgagt 180  
 acacatcaac agatgtgact tttcattttg aatggtgaan aattaaaaca tttagaagct 240  
 ctggtaatca attacaagta ttgtgtaatc gattacacaa gtctaaaata ctgtaagact 300  
 atctaaacat aagttataac tcttgaaatt gaaatcttaa cgttttaaaa cattggtaat 360  
 cgattac 367

<210> 4240  
 <211> 423  
 <212> DNA  
 <213> Glycine max

<400> 4240

ctaagattag cctgtaggca atttcttagt gcgctaaaaa ttcaattcat cactcatgcc 60  
 aaatattagc agagagcatc agaccgggtca actatgataa gaaacagcac agtagacaat 120  
 ctgcttcatt tccttaaaca gcaaccgctc gatgaagcaa acctcctgca tacaaccatc 180  
 tttagttgca cttacttggg acattaaaat actcagacca agaaaattga aatgcattag 240  
 tctttgcaat ttgtattgca ccatacttaa ggatttccat gtgaatagtt tataaccataa 300  
 cacagattat gctgaccaa ttgacccaag tatacacaca agacttcaat aaagtgatta 360  
 caccaactca cttatcatca tcttaaaatg aataatcctt cacatcagat cttgaatcac 420  
 cca 423

<210> 4241  
 <211> 419  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4241

ggatcttaag cacctgcagc tgcagctttt atccaggaaa ttcttggtggg cgaagctcct 60  
 tcttccttgg cttattccct agtggatggg gcctcccctc tctcttctc ctttgcccta 120  
 cgctgcatct ccattggtgaa aaatcaccat tgaaggacct cattggagct caaagatcca 180  
 gcctccatag aatcttcaca agcaagcttc catcacattg gaccattaat gatcttttta 240  
 tctttggaag aggttaataaa gctacgtggg tattctaggc cttctttaga aatctatgct 300  
 taaacaataa aggttgaaaa gaccatttta aggcactgga ccttnaaaca tggctctttg 360  
 gtgatgaaaa acactttgct tatgaattga ttttagcctt agcttcactg tggttatta 419

<210> 4242  
 <211> 437  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 4242

nttanatgcc aaaatagccc ctacctcctt tcttcattaa aaatgtaact nntttttttc 60

cgganaagtt gtttagctcc attnttagaa acgttgngct tcttgttttc tcttttttcg 120

tgcgacattg cctctgggtc gtaggggtag cagcgttgag cacagcggtg aaggtgaagg 180

tactggcgtc gagcgttgcg gtggtcgggtg ggggcaaacg aggtacgcag atgggtggttt 240

gactgttgcg gacgtacgga tgagttccgg atcaacttga tccgtaagct tttttcagat 300

caacttgatc cagaagctgc ttaataatct tctggatcaa gttgatctgt aagagacttt 360

cggatcaact tgatcccttg atccggaaga gtattaagca gcttccggat caaantgatt 420

caaaaaagtc ttatgga 437

<210> 4243

<211> 394

<212> DNA

<213> Glycine max

<400> 4243

agctagtaga atggctagac atgatacatg tcaaggtttg gtttggttca aggataaaaag 60

ggatgccccca cattattttcc atgacacaaa tgcaacaatg atgatttgga aatttttatgc 120

aaaactggtc atgcatgcac ctatgtggac actcaagtgt caaatttttta tggatcatgtg 180

atgctagggc tcaagattca tttcctctac tttagtccac ccaaagtttc caaaatatgt 240

tcttttatca atttgtgcat tcatccgagt ccattatgag cgtccgggaa aattttcaca 300

gcattcacc cttcaggtgta cacacacatt atccaaaaat atggtatgat cagtgaattg 360

tttcagagaa taggtggaga tcatctcttt tcat 394

<210> 4244

<211> 356

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4244

ttcaacaaga gtcttcacat ataaccatca tgaagcagat atctaacaaa actaccatc 60

atatctccca aaaccccata cccacgaaat ttaagagaga aagaagtnca cccagacctg 120

aattttcgaa gtcccaattg gaatcacgca ctttacgaca tgcgaaaggc tctggttgct 180

gggctaggag canaaatgag caccacaggt tggagctctg ttgggggttc aatggagaat 240  
 ggaggagaag gaaaaagcac cgtgatgaag agggagagct tcttgaattt ctgttttggc 300  
 tgagtgagga gagagaacag ctttttgggt taaataaaag gatttcctct tttcta 356

<210> 4245  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<400> 4245

agctctacta cactaaccaa attccgaatg tatgatacga tgggtgcatat cttatattac 60  
 tatttataaa cacaactgaa atttaaagca accactacta gtccaggatc tatactattg 120  
 caatttccaa ctgttagttt attagtggct aaaagagtag gtaaaagtta accagactaa 180  
 ttaaataata atatgccctg tttctatata ttgttaccat aaatatattt aaaaaatcag 240  
 accaggctta ttgctttaag tttttcacta tatataaatt cataatgaaa tgtatatttg 300  
 ataatatatg ctctaaaatt tagatatatta tttattatta aattcttata tgatggatat 360  
 attactacat ataaaattca ctataagaac tcagagtgcc ttccaaccac caattatttt 420  
 atattgtaga atcg 434

<210> 4246  
 <211> 347  
 <212> DNA  
 <213> Glycine max

<400> 4246

ttagaccttt gatggcatgc tggcatcacc ctcatcttg ctcttgtag cttcaaactt 60  
 atcaattgct acctgcagtt catcagtgcc tccaacagcc ctcatgggtg agaagtatgc 120  
 accaaagaca aaagctgtca aacccccagc aactaccaga ttctttgcct taggtggaag 180  
 gctcctatat cctaaaagtc cagccatctt gatcaatgtg ggaaaaaagg gttagcacia 240  
 tttcacacia ttacaattac ctttcaattg cagaaagca aaaagatcac aaaacagata 300  
 attcagatct gtaaagaata atgagtagac attttcacia acagatt 347

<210> 4247  
 <211> 464

<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4247

agctntaatg gtgttaagaa gaaatcacat gttttgtatc atcaacaaga gggagaatgt 60  
gaatgtatgt atacatgatt ttgatgatgt caaaagaaga atcaaacaag gctcattttg 120  
cttcaagatt aatacaagat tggttcatca aacaaagcct tgattcaaga tttcttcaag 180  
atcaagcctt gcctcacaat gaaaggtttc aagtcattca aggcacatgt aatcgattac 240  
caatacatgt aatcgattac caatggtttg aaagtgtgta atcgattaca catcatatgt 300  
aatcgattac cagagactct gaacgttggg aattcaaatt ttacatgaag ggtcacaact 360  
gttcaagaca aacaactgtg taatcgntac actaattatg taatcgatta ccagagagga 420  
ttttcaggaa tatcgccaac agcacatctt atcatttgaa tttg 464

<210> 4248  
<211> 362  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4248

ctgtcgaaat gccatgtgtg ggtgagttag acatacccat tctgttntan ggtttttgtg 60  
atgatgtttg tgatgtttat atgctgaaat tgctaattga aatctgttag agacgaaggg 120  
tagaactaac ccaaggtttag aaagtgagaa tgtgatgtta tgagtggaaa aagagtgaga 180  
ctttgagagt tggaaggcta agtccgaatt ctgtggtaaa tggagggttag agtgagtcaa 240  
tactagcttg aaatgtcatt tagaacatgt gagaaagggtt aggctgagct agagagaaaa 300  
ataaatgacc aaagtgaacc aagagccatt tctagggcaa aattgggtgt tgaagagtca 360  
aa 362

<210> 4249  
<211> 399  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4249

tatcaaaatg caccttaagt gcatgtttgg aaaagattaa tttcacgaaa tattcacttc 60  
 ttntttgaaa gttctcttgg aaagctaaca aaaaataaaa gtgattatct ctagaaaata 120  
 agttgaatca aacatgaact aaatctttta agagcctaaa agtgattatt ggctgcaaaa 180  
 aagacttcaa ctaaccaaat ccatacaaaa caagcactaa ccaaagttct ctcatgtaca 240  
 acattgacaa acatgtgttc tacttctaata gcgccctttc caatttccaa attcagtttc 300  
 taaacctttg aagagctcga gtgattactg accggtaaaa tcatattctc agggccaaaa 360  
 tgcagcgagc tatgggactc tattatctac tacaaaaaa 399

<210> 4250  
 <211> 341  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4250

agcttaatca caaaggatgg catggtcact ggctgccata ttttcaatca gctccataac 60  
 ttcatcaggt gtcttcagtt tgatcttccc accagtggag gcatcaagta actacttcga 120  
 atgggggtcgc aagccatcaa tgaatatggt gagctgaacc ggctcgttga acccatgggt 180  
 gggagtcttc cggagtaaac cgtggaagcg gtcaagagct ctccaccttt tccttcggag 240  
 tcttggactc tggaaaatat ttcttcaaan atttctccac cacctcttcc catgtctgca 300  
 aactatttcc cttgacgagt gcagccattt ttttgcttca c 341

<210> 4251  
 <211> 429  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4251

tacgtgacac tataaaactc agcttaatag tcaggaaata atataattca ccctctttta 60  
 tattcgagcc attgatcaac aagggatcaa gcagtatctt gaaaagttca caactacaga 120  
 tcatggctct taattttggt ctgaggaaac catcatagga caccatatta atggggaggg 180  
 ttaccactat tttggaaatc cgaatacaaa tctttattga gccatagant taaacatttg 240  
 ggaagcaata gaaataggac cttacatacn caccatagta gatgtaagca ctagcaccac 300



aacacanaaa cctagagata agttgactga tgaggataga agaagatcca atataatctt 360  
 aaagacaaaa acattatcac ttctacccta tgaatagatg aatattcaca catatagtca 420  
 atcatcttg 429

<210> 4252  
 <211> 293  
 <212> DNA  
 <213> Glycine max

<400> 4252

agcttaccaa ttctactaaa ctccagctg ttgctcattt accctcttgt gctcgcttg 60  
 tatgtataat tatgcacaaa atcgctgccc ggctctatgt ttaatacct gcatataata 120  
 ccatggtgtc ttcttctaca atcgcacaa aatatttact tgtcatgccg gcttctcagt 180  
 ttaataatca ttaacactct ttaattaaag aacgatgccc atttttgatt gcatgaataa 240  
 atgaatcgga atccatccaa tgcttagaat aacttttcat gctgtcatgc atg 293

<210> 4253  
 <211> 365  
 <212> DNA  
 <213> Glycine max

<400> 4253

tctgtggtta tggaataatt gattatcaaa agtgattatc gattatttta acacacaaag 60  
 aactccta ataaaggttcca aacaaaatct aatcgattac taaatgtagt aatggattat 120  
 ctcgagccat aaagtcttta ttctggtgaa acttacatat gtaatcaatt attgaaactg 180  
 ggaattgaat aattccgtga ttcttgccaa atttcaagta gaagtgaact atgtggctta 240  
 ttctaact ttgtaattga ttattaaact ttggtattga ttattaaact ttgtaatcga 300  
 ttacattata ttgaactcat tgctttaaga aactttgaga atcaatcatt aatctaccat 360  
 gggttg 365

<210> 4254  
 <211> 393  
 <212> DNA  
 <213> Glycine max

<400> 4254

tgtagcaagg ttattattat ggttaatagt tggactacat tgtgagatac attgcaagtt 60  
gtctataaca atagtttttg taagtataat ataataataa tgtgatgata tgaagaataa 120  
taataatcta taaatgaatt gcaaattaca aattacaaat ctgtattaag tatcaccatt 180  
aatagctgaa tgttgtcttt ttgtttcttg caaaatagtt ttcttacgct tccttcgttc 240  
aacatatatg tccatgagta attgatttct gcaacaactg ccttataatt gccaaacaat 300  
aggaaaatca aatgttgaaa ttgagttaaa taagttgctg tagtaggctg actttaaaat 360  
gataccaaca ttatagttat ttgcatttgc ttc 393

<210> 4255  
<211> 414  
<212> DNA  
<213> Glycine max

<400> 4255

tattcaagtg acacagctag aagcctggct ggaaccttcg agtgacagca atcttgtacc 60  
catcccaaga atgatttggg ttccaagatt cccaccattg gaaccaaccc aaagcttctc 120  
catccatcgc gatcatcact gcttccagct tgtcctcttc cctaactgcc cataaccgaa 180  
agtattgctc aatcttggtg tccagcccat tggatcctca ccatcgaata tgggcaattc 240  
taaattcctc caccgattgc cgttgtgcgc tgccatacct tcatccctc cgctcgecta 300  
aactgtatgc acatttgcgc ctggagattt tttctccac gccactgtca accttggat 360  
catcccttcg atcgagctca gccgcgattc cactgcttcg cgattctcct ccat 414

<210> 4256  
<211> 399  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4256

gcagaggatn tttcaaactc ctcactttct tagatctctt ctctcagata aaactttttc 60  
cctcttacca ttttcttacc gtctattcac acccagcaca cacaagagaa caagaagaga 120  
gagacagaaa gagagggaga aagagaaaat caaaaaccct ctctttcaag gcatgtcata 180  
gatcgtgttt atggaatagg gaggcaataa cataggagat aagatatata ccaagttatt 240  
agaatcatat gtacataatt tgttttgtag cacacatttc tgattccaaa atcagttgaa 300

taagaacttt actgaaatag gaggcagatt ctcatctgta gtaaaagtgt tcctttctcat 360  
attaaattag atgaacagac aaaattgtac tatgttttt 399

<210> 4257  
<211> 398  
<212> DNA  
<213> Glycine max

<400> 4257

tgaaaagtgc aagaaaacga actacatttt ctgcattttt tgaaaaaaga gatgaactcg 60  
ctaagcgagc atgctgcgct aagcgagttc atcagtactc attgtatata ggcgttctct 120  
gaagaactcg ttgagtgtgc ttaacgcgct aagcgagttc atcctttgag gatgaacact 180  
tatectcttg cttaattacc tgtggctaag tgaggatgaa tcgctaagcc caggttactt 240  
agaaaatttt ttattgatag ccgcgcgcta agctgagctt tcctgggcca agcacgattt 300  
gttgcgcat ccgctgagtt aagcgagctt cgctcgctaa gctcccaata cttagtgaaa 360  
ttttttagga gttggtgccg ctaagcacao cctttaag 398

<210> 4258  
<211> 402  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4258

taagctcttt caactgcaca aagctattaa tattngaaga gtatccatat ggaaccttca 60  
cccgcgaag aactgcaca aaacttatct tctccttttt ggacaaagca tggcaagcta 120  
ggggcaagta aattttcttc ccacagacc ttggatgcaa ctgtgatcgt atccccatat 180  
aagctagatc ttgatgggta ttcaagccat ccttcgtctt tccttgaatg ttaaggagca 240  
tcccaatcac actgtcaca acatttttct ccacatgcat aacatcaata caatgtctaa 300  
cgtctagatc agaccagtac ggaagatcaa agaaaatgga cctcttcttc catatgcaac 360  
tcttactttt atccttcttt tgggtttttc caaatataat at 402

<210> 4259  
<211> 369  
<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4259

gtaaccgccc canaatggct atttccttat aaatagccgt gatgggggag gggtttaagg 60  
ggttccaagg ttcaagagtt gatagaagaa agaaagaaga agaaacaaag atgaggcgct 120  
accgaatcgt gactgtgatc attccctaca tcgttttctt gttctgtgtt cctcgtgcaa 180  
caatcggtta gttttgtttt taaggattga gtatgatcta tgtaccctta ggggtcccct 240  
ctgttattat gtgcatattc atcttctcca tctatcattg gtaatctcat tttttatttg 300  
taaagtttaa tcttaactga tcactagttt cgtaaagttg tctttaaaga gattgaaagc 360  
taataaaca 369

<210> 4260

<211> 386

<212> DNA

<213> Glycine max

<400> 4260

tatgtaaact ggctctctgt ttgtttgtta caaaccttaa ttaatcaatc agtttgattt 60  
gattttgggtg tacaataatt taatctgtga acataatttg ttgatcgcat cacacgtctg 120  
ctgaaattgg ttatattcaa acggtgcgtt aattaattag aagatttgat aattgatacg 180  
tttgtgtact taaaagcaac gtatggcttt ttgtagtcga tctagttgaa gattttgaag 240  
tggacacaaa cttcttatta tttaattttt gttttttata gtcgacagtg gttaaaaaat 300  
gttattaaag ctctatttac tgaatgtttt tggtttatta gaccatgtat aaggcgatat 360  
tgttttaaac atatccataa ttaatc 386

<210> 4261

<211> 378

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4261

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cgcaatcgaa agtttggaac tcatgatccc ccttagtttt tgctctatcc aagggaacg 120

caaccatgtg tcagagcatc atggagtcta tgacaacaac gagtcgtgac gaagatggat 180  
 ttgtgatagc ggcaaaacta tgtcagtcga tggagatgtt gttgtattgt gaaagatgta 240  
 agaaagaaga atccgtggaa gaaatgttat gacaaaaaaa tgatcatgat tacatttgac 300  
 actctcttaa atatatgaat accatacata aattatcata gtagaccagt ctttaacttaa 360  
 cctttaagat agataata 378

<210> 4262  
 <211> 350  
 <212> DNA  
 <213> Glycine max

<400> 4262

agaatcggac ctcagtgtga aaagttatga ccatttgaat atctcgggag cttccgttgt 60  
 acattttcga gcgtctgtat atgagatgcg cctgaatcgg acatccgagt gaaaagatat 120  
 gaccatttga atatgtcgag agctttcgat gtttaatttt gagcgtttag atataagata 180  
 agcctgaatc ggacatcctg gtgaaaactt atgaccattt gaacttctgg agagcttccg 240  
 ttggggattt tttaacgtct ctttatgtga tgcgcataaa ttggacatcc gaattaaaag 300  
 ttatgaccat tagaatatct caagagcttc cgggtgtacaa ttctgagcgc 350

<210> 4263  
 <211> 354  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4263

tnctcttttc ttctgttgcg cggggccggc cttccgtgga caaaactatt ggatgtgtcg 60  
 cgatgttggg ttgaggcaac gtgctgggtg ccggcccttc tgggatcggg ggatagaact 120  
 cgacatccct tcgagcatag tcttgagggt ctttgtggac ttcttcggct gttgaggagg 180  
 ctctctttca agacgggaga agcaatatgg cccgcacct cctgcaagac ggggtgtgag 240  
 ttattgggag gcaatccata agtgaagcc ggtcgggtga tcccagggtga gggctgccat 300  
 cgtgccccag aggtcccttc cccgcctact atgttgaggg agatgggtgcg catt 354

<210> 4264  
 <211> 399

<212> DNA  
<213> Glycine max

<400> 4264

tagtatatgg acttgggtgt tgcccagttt catcatatct tccgtaatac ttatcacctc 60  
tatcatatct aataattttc acatttatgt ctaattgcc a ttttacttca ttgtagtaaa 120  
tttctaaagc atccattgcc taagaaatct cgggcagtaa gtagacataa ccgtaacgtg 180  
aataatcatc aataatgggtg ataaagtatt attcctttcc gaaagaacta acatcaaaag 240  
gtccacaaat attagtatgc acaatttcaa gaagctgagt gcttcttgta gctcttttct 300  
ttgtatgttt tgcttgtttt ccattaatac aaccacaca aatatttaga tccataaaat 360  
ctagataagg aagaatttca ttctttatta atttttcca 399

<210> 4265  
<211> 392  
<212> DNA  
<213> Glycine max

<400> 4265

tgtaggatta tggggtaccc atcacatgtg gtactatgtg gcggtcgggc gatggtgcaa 60  
aacgattctc cacatccaca aatcacgtat aaccacccat ccctgttgc ccacctcaa 120  
ctgagctcac gtactccac gtagccctta tctcgttcc tctcaacgtc gggccccat 180  
caatcctccc aagcttccac aacatccagg taattccaca tccaatcatc atggactaac 240  
aaaaccaagc aaaacagggc aaaggcagaa aactctgccc aaaactcaaa ccaaaaatca 300  
cagcttttct tcaacttaagg accccagtaa catttcttcc gttccaattc gttaaccgtt 360  
agatcgactc gaaaatttta ctgtaagtcc ct 392

<210> 4266  
<211> 381  
<212> DNA  
<213> Glycine max

<400> 4266

taaagcacia cattgaccat gagctcttca tatcgccctc agtccaatgg ccagactgag 60  
aatcttaata agaccattga gatgtatcta aggtgctttg tatttgaaca tctaagagt 120  
tgggttacta tgctaccttg ggcttaattc tagtataata cttcctttca ccaaagcttg 180

ggcatgacac catttcaagc agtttttggg agacctccac caacgggtgat gcactacgag 240  
gttgatccta aagatcccgga tccactcaag gctttattac aactacgtga tcaacttttg 300  
agcaagctta aaggtaattt actaaaggct caacaatata tgaagatgca agctgataag 360  
aaaagaagag aaagagaatt g 381

<210> 4267  
<211> 397  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4267

agcttctaca atctccccct ttntgatgat gacaaccctg aaatcaagaa acacacacac 60  
acacacactt tttcctagtc gatcactcac ttaattctcc atattctccc cctttgtttt 120  
tgagtttatg cttcacttga aattaagtta attacttatg tgagttcttg atttaatccc 180  
tatttctctc cccctttggc atcaacaaaa agccaaagtg cgtaacaaat ataaatcata 240  
catacattac taatcattca caagacattc attgaaaaat ctaaaccaat catgaagcaa 300  
gaaacatgaa tagatcaaat atataaaatc cacatagtca tataacacaa ttcataattg 360  
ttcaatcata ctatgcaaat aaaagaaata ctaaatt 397

<210> 4268  
<211> 402  
<212> DNA  
<213> Glycine max

<400> 4268

tgtaagattt gcaagatcat cttccttgac aactccttga aaattattgc catcaatagc 60  
cagagatgac aatttagaga gtgatccaat actttcaaat ggatttccac tgaatttatt 120  
aatagacaga ttgagatatc ttaatgatga aagttttcca aatgatattg gaagagcacc 180  
accaattaag ttgttggaag aatctagcat gtcaatattt ttaaaagccc caatttgatc 240  
tatcagattg cctgaaagtt gtgaactccg aactgcaagt gttgtgattc cctaggaaat 300  
acaaagagca agaatttcta aaagttcatt aacctgttgg ttgagtttga gatatgataa 360  
acctatctcc cttaagttgc agagattatc caaagaagtt ga 402

<210> 4269  
 <211> 390  
 <212> DNA  
 <213> Glycine max

<400> 4269

tagacaacac agcatacaaa ctacattaat tggatggcaa agtattttcca agaacatgga 60  
 acgccaccca cctgaatttc tacttttagtt gacctaattgc aaaactagat gttatttcttt 120  
 tttttcctac tcaagtcttt tttcccaaaa gagaaaaaat atggggtttta gcttgagagg 180  
 ttttcatgag gtacatctaa gataacaaaag ggaatttgta ctcaatcaaa tacattgaat 240  
 aaaattctgc atcccttcat tttcataatt ttcttggtgc ttcaagacag gtacatccgt 300  
 ggttgagct ccacatgctt gtcaaaccga aggtccaccc ttggtgagtc ttgccaaaat 360  
 ctaggataaa tgggtcattg gtcattttcc 390

<210> 4270  
 <211> 389  
 <212> DNA  
 <213> Glycine max

<400> 4270

tgagggtttgg gtctcaaaac cagttacaac aatttttgaa gcgaaagaaa gataaaatct 60  
 caacattgaa gtttggttgg tcgtgggtgt ggcttaatct ccaaattcat ttttgaaacc 120  
 aaccttaaac tatccacatt agtgaaactc ccaccatcaa tgatcaaaga gcataactac 180  
 ccttgatga ggcacctgc atgaaaaatc ttttctcttt gactatcatc caattcaact 240  
 gcttggtac ccaacatcct tctaactgtg aacaaatctc cttctaactc tctttcctct 300  
 tgatgctcct cttcatcgt agatgggaaa gattttgaag aagattcact aattatttct 360  
 ctatcctcct taagtaacat agtcttctt 389

<210> 4271  
 <211> 397  
 <212> DNA  
 <213> Glycine max

<400> 4271

ggacactatg aatactcagc tcgattggag cggatgggac agtctgctc gtttttcacg 60



aatcaataaa tgattcgccc tgccctgtga cccacgggt caaacgtgcc gatccgcgac 120  
ctaatttaaa agaattcgat ttataaaaa tacaatacaa tgaaattaag ttgaatacaa 180  
atgtaaataa aatctcaata attagtcaat tacatcaata aaataaatat tgtcttaata 240  
aaagaaaatc caagcaatac atctaaaata tgaaatttaa acatctccaa caacaaatga 300  
ttccatattt gataatgttt aatgaattct gactttaata aaaatataat acaatgaaat 360  
taagttgaat acaaatgtaa ataaaatatc aataatt 397

<210> 4272  
<211> 361  
<212> DNA  
<213> Glycine max

<400> 4272

tgaaggtagc agatgatgag aggatggata aagagtgtag gaactctatc gcctgtgcct 60  
cagagaaggt ctaaacattg aagagtaatc ctcaaataat acaagggtgaa aaatgcacac 120  
acatggcctc tatttataga ctcatgtctg caaacaattg gaaggaattt ataatttctt 180  
ttcaagattc acttgaatct gaatttgaat tgggtggagcc caattttgga gccgaaattg 240  
cagtaattat tattagagaa tttcagttat gggtcagccc actaatacaa gacctgggtgc 300  
aagagtttgg actaatagtg ctgatgtggc atgacgaatg tatagcatga aagacatgca 360  
c 361

<210> 4273  
<211> 380  
<212> DNA  
<213> Glycine max

<400> 4273

ttggagaatg atttctatac aaaagttagt cgtataaagc gactaacagt gtgttacatt 60  
atggcatttg cctatgttcc tgatgcagga ggcttgagga agaagatttt ggaggaagct 120  
catcattcct ttacaccac tcatccgagt tctactaaaa tgtatcaaga cttaaaggag 180  
ttttattgga agggagggat gaaaaggatg tagctgaatt tgtatctaaa tgcctagtat 240  
gtcagcaagt taagacagag catcagaagc ccgtaggttt gtttttagagg attgatatac 300  
ttgaatggaa atgggagaga attgtaacac cccagattct agttcaaac attgctttga 360

aaactctcgt taattatattt

380

<210> 4274  
<211> 379  
<212> DNA  
<213> Glycine max

<400> 4274

tctaaggacc accgaaacga attgcatcaa ttttcttctc cagtgaagca gggtcaccca 60  
ccaacaagtt tgaagcaacc ttcattttctt ccatttgcaa atttttcccg caaacagAAC 120  
tagaaaatga tacccttttaa cgaaaaagtg tcataataat taataaattc ataaaaggaa 180  
aagaaaaata caaacttttaa catatagatg tgcaatacaa atgaggggtct tgaattatta 240  
tttacctgga acctacaaat atagttattg ttgcccata tggcccttga ggctctgaat 300  
gggctttcga ttaagggtttt tggggcagaa cacaatccat aagctagcca cgacactttc 360  
gcttgggaact caaactttct 379

<210> 4275  
<211> 415  
<212> DNA  
<213> Glycine max

<400> 4275

atgcaatgct caagcttccg ttgccgagag catcgatgat ttacgcattt cagcctatgg 60  
tgccctttag cttatgacaa gagccggacc ttgttctttc tttcgtgcac atccctgtct 120  
aaagttccaa gtgctttctg catcaccac atccacgatt agccaccaca aaccatcatt 180  
gttctccatg gaaaaccac accgagagga acccttgaac cgaagcacia tttccaactt 240  
ggcttgccgg ttctgtagag aacgaaaacc ctaatctgat ctttcgcttt ctttcgaggt 300  
aaccatggct ctatgcttgt ttcttgtag tttcatcttg tctttgcac ttttctaact 360  
ttgcaaccac cattgcatgt cttatgcttg ctttgaaaaa ccttacaaaa agaga 415

<210> 4276  
<211> 397  
<212> DNA  
<213> Glycine max

<400> 4276

tgttgaacct ctcccattac tcatataatg tctctccaag ttgttgcctt attgatgcaa 60  
 gctccattgg agcttghtaag cctaggatct tcttcatcaa tggattcctt tgcttcttgg 120  
 aagatgaatg gcagtggaat gaagaaggaa gagagagagg agacgccact tcaaggagaa 180  
 gatgagtcta gaagaagctc accaccatat gagggcatgg ataaaagctt ggaggaagaa 240  
 agagatgaat gaagggagag ggagagaaga gcacgaaatt ttgtgctcca aatgagcttt 300  
 gaaatctgaa gtttaatat ccaatgatca aagttgaaaa aaatgcacac acatgacctc 360  
 tatttatagc ctaagtgtca cacaaaattg gagggaa 397

<210> 4277  
 <211> 394  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4277

ntaattaaat ccataattnt gttttgttgt tgagtgtgat tttttt<sup>o</sup>ictg gtatccatga 60  
 cattgggtgtg aagtattcat ctgatgacta attttcattg aaaaatctga ctaatcactt 120  
 ttagtggagt atctccttcc aactatgctt tttttcatct ataatgttcg aaccaaacac 180  
 cttacttaag ggggatgtgt gtatgatttg aaaatgacta agttgggtat tatgttatgt 240  
 gcaggaccct ttatgtgagg agcaaaacag attaggttca atgcctccca cttgccacaa 300  
 caagtgcaac cagtgtcatc catgcatggc agtgcaagtt ccaacctcgc ctaaccatga 360  
 acgagttcac ccaggtcttc ttcccccaac tgct 394

<210> 4278  
 <211> 382  
 <212> DNA  
 <213> Glycine max  
 <400> 4278

gaaggagtac aagatttggg gttctgtcta tattctatct tctcttggtta catctttctt 60  
 ggaaaattat tccgatatgc agaaaaagtc ttttttaaga atatgacata tcatacattg 120  
 aatacacctt tcattatctc tcagattaca gtaaaaaaag atattattat ggcccaatta 180  
 tcttaccttt taatgttgat aataactctc ttatatagat agatagtata atgtatcttt 240  
 ttttatataa aaggagtgtc aatatacaac agagtgtttg cgaatgtatt gttggattac 300

cataatatcg atatagcgac ttgctggtat ggataaataa tgtattttaca ataattaatg 360  
agattgatat agggaaagaa aa 382

<210> 4279  
<211> 406  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4279

ntgagccaaa atcctgactc accataaacc ttgaccctgg tgagaatgtc aatccttacc 60  
ctcggaagca aaaaaggaag agaaggaaaa tttccaatca aaggaaaaaa gagaggaaag 120  
gaaattccca atcaaagagt gggagaaagc aaaaagaaaa gaaagaaaat tccaatcaa 180  
agaatgggag aaagaaaaaa aaaagagaag gagaagaagg aaagaaagct cctgggtcaaa 240  
gatcgaaaga aaacagaaga aatatgcaga gaggtctttg gaccagacaa tatctgaaca 300  
atacggaatt gtcaccaa at gaacaaaaga aagaaaagga aaccataacc taaaagtgg 360  
cttctccctt tgattaccaa ccaaatcat gtgcattcgt gacttg 406

<210> 4280  
<211> 391  
<212> DNA  
<213> Glycine max

<400> 4280

taataagtgc atatgatgta gctccatgta gagcttgtaa gccttggatc ttcttcatca 60  
atggagtcct ttgcttcttg aatatcaatg gtagcggaat ggagaagggg gaaaggtgat 120  
tgagagcgcc acgtctagga gaagatgagt caagaacaag ctcaccacca tatgaagcca 180  
tgataagag cttgaacgta tgagaagata aatagagga gagggagaga aggggcacga 240  
aatttatgcc tcaaatgagg tatgacctt gaagtgtaat ttctcaaata atcaaagttg 300  
aaaattgcac acacatggcc tctatttata gctaagcgt tacacacaat cggagggaaa 360  
tttgaatttc tattcaaatt tcacttgaat t 391

<210> 4281  
<211> 380  
<212> DNA

<213> Glycine max

<400> 4281

tgtcattggt ttagacatga ttggtacatg atttgggact aggattcaat ttgggcaaaa 60  
ttggatgagg gaaagagtgg ttttcgaaat ctgcacttta tgcagaattg tgctgttgaa 120  
atgtgcagca caattttgta taagtgcaga aaaatgcttg tgtatggctg gttgtgaaag 180  
ggtagtacat atgggggttct agatatttac tagcagatcc caacgggtcaa aatgtagact 240  
tatgtactag agacttccag taaaaatddd gagtcgatcc aacgggttaac gaattggaac 300  
gaaggaaatg ttactagggt aattgtatgt gaaaagctgt gattttgagt tgtgttttgg 360  
gcagagtttt ctgcctttgc 380

<210> 4282

<211> 361

<212> DNA

<213> Glycine max

<400> 4282

agagatgagg aagtgttgaa aggtgttact ttctgctttt attggcgacc acagagtggc 60  
acctggagat atgtcgcggg ggtcaagata ccttgtggac atcagggtggg gtgctattgc 120  
ccataaccaa gcttgaccaa tccccagcca acccaggcat aatcggtcag tgagaacctg 180  
tgatgtacct aagcaggcga gctcctggca gacatcagat aaaatgaaaa caagaccaca 240  
aagcatggag gcttgtggtg gctggccagc tgtgaaactt gatagatatg tggattgtgg 300  
cctctgggaa tcgattacca acggtgagta atcgattaca ggcttaaaat tgaggacagg 360  
a 361

<210> 4283

<211> 387

<212> DNA

<213> Glycine max

<400> 4283

tccatcacag ttggaagcaa tagagggaat gcactatcta tgacggtagg acgagagtga 60  
gatagagtag tgtgggcatg acagagcttg caacagactt tagaagtcac ggcagactga 120  
agggcgaaac tgagtaaatt aaaggcacat atgtattcga tcaaagagtg aaaagtgaaa 180

attaaagtaa ttaaaaatct aatgacttca aagatgggtt ttaaaaaatc gtagtagtca 240  
 agttagaaac aaagatgggt tttataaaac ttccttcgta acattcatat caaagaaggt 300  
 tctataaaaa ccatcggtta cgccttaaaa tagttggtat taatttaaaa aatgtcacca 360  
 catgttttac tacattgggt tttcgat 387

<210> 4284  
 <211> 372  
 <212> DNA  
 <213> Glycine max

<400> 4284

ttgaaaaga taagctttga aaggaccct tcaatgagta aagaagaaca aactatcacc 60  
 ctaagtcagc cacaaccata agcatcaatg gtgcccttga ccttacattt catcaaaatg 120  
 gcataacata ttgattctgc aaaaggccaa tggccaccat acgacctttc acccaactat 180  
 acacctctaa ccatggcaaa tttttcagaa agtgaccac taatgactca gcaactagt 240  
 gtgcaacaat aagctcaacc gcagatcttg ttcagaacat gtctcagccc cgaaataata 300  
 aaccttgctt ctcaaggaaa attcttggtac tatctagaca ctacacactc ccttctaatt 360  
 gggttggaag gg 372

<210> 4285  
 <211> 465  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4285

attgaacgtg ttgagccgga tgatacctcg caanncanga cnanaagagn ctactcagt 60  
 gatgggatag ttccttcaaa cataaccaca ctttcgggtg gattagaaga tttatgtgct 120  
 gagatttacc tagcgaacga cttgtacgag atctatgttt cttacctcct ctagtctggc 180  
 ttacgctttc taaggaatgt ggtgctttgt cacaatgatt gacccttcct cggtagaat 240  
 tagctcattc atgggccatt taggccttgt acttatggca ggacacttga aataatccag 300  
 agctagccat gagaccggag ctgccttagc agaaaggccc ttctttgggt tagggcaaac 360  
 ggtcagagct gtattttaaa atacgctttc attaaaaaat ctacagacta tacgttattt 420  
 atgatcgagg ccttgatatn cagtccatcg ttatggggca tateg 465

<210> 4286  
 <211> 369  
 <212> DNA  
 <213> Glycine max

<400> 4286

tctaacggtg aatttttgtg attactatat gggcgtatat aaaatttgca atcatatggt 60  
 caccgacacg acatttttctt tgttttgtga attctattat atatcttatt ggccccctctt 120  
 gtagtatatc ttcattctgtt caacaaataa tagtattcat tatttagcat tacagttatt 180  
 aaaacgttct tgatctttct gctgaacaca atttctctat aaagacaaga tagattcttt 240  
 ggacctagat aaaagtaaca aatttacaaa agggccgtgt ccttggtgct tttatttata 300  
 tctttcctta ctgatatt acaacataag tcttattaaa aggacaagat tttgaagtat 360  
 gctacttac 369

<210> 4287  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<400> 4287

tataacttac aagccttcaa ctaacttata cgttagtttt atcaaacata accatactga 60  
 aggttcatta gtttttttat ttcatatatt tactagcaac attctaaact ctagtttcca 120  
 caacttactt gtttagcttc taaaaattag tttttaaaca tatttacata attctaaaaa 180  
 aacaaattat gaaaatataa ccttttactt atagagtata atttcaaaaa ttttaaattt 240  
 agtcatgtat acaagagcat ctttagaaga aagctttttt tttcttttat aaaaaaaggt 300  
 caaagctgta tttaaaaaaa aattcaaaaa aaaaaactca catatatacg tcatcattga 360  
 tcgaagcctt actatcaaac caaaaattag gtgaat 396

<210> 4288  
 <211> 120  
 <212> DNA  
 <213> Glycine max

<400> 4288

tgtacgtgag caagattgtg gaggatggcg taacatcaac aacaaatggt ggtggcgagc 60

ttcccaaggg aggaactggg tggctcatte aggagagcac caaagaggat ctgaaggagg 120

<210> 4289  
<211> 100  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4289

tanagtatgc ccgagtcatt catccctata agatgttggt gaagtattgg cgatcagaat 60

tgccatctct tggactatag ggctgaacca agctcatgct 100

<210> 4290  
<211> 176  
<212> DNA  
<213> Glycine max

<400> 4290

tcgaactcta gcatgtacat cgtgaaactc aaggctctaaa tacaatttgg aagtggcatt 60

agataggatg cccaagagca agggaccaga aaaatttttaa accaacaatt aaggcaaacc 120

tattctaaag ggacagaaaa aaaatgattt tggttaagtg aaatgaaccg gctatt 176

<210> 4291  
<211> 269  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4291

tanacatggt tttaatttct caaatttagg tcattttttt tgtctttcaa atttaaattt 60

atTTTTTTtag tctctagggt tttaaggggt cttttagtgc cctcttggtta gtgtgggtca 120

aattgaaaat aatgagtctt ttttttacca catttgagca atTTTTttaa ttaatcacat 180

aagtatgtaa atttccaatg aggtacgaga aatgagtgat ttgtgggttag gaacacgatt 240

tcatatgtga aggaatcatc cctgctcgt 269

<210> 4292  
<211> 382  
<212> DNA  
<213> Glycine max



<400> 4292

aggatgatgag taattggaga aaatttttga atgctgttta ggtgaatggt taaagtaaag 60

gtgaacgatg aaaagaatat ttgaaggaaa ataaggaaag ataatgtgtg aaaaaaaaaat 120

ttaagtttaa tgaaatttga ttttgatttg ttttttaaag aagaacagaa aataagtttg 180

atcacttttt gatttgctta agccaatggt tgacagagag aatttttaac aattagaact 240

gaaacaattt ggtaggag cttgagctta agccattttg ttttatacta aggccaaaaa 300

caaatagaat tcaccctttt gctcccaatg ggctaggctt aagccaaagt tttcaagctt 360

aaaaatttac gcagaaaaaa ag 382

<210> 4293

<211> 368

<212> DNA

<213> Glycine max

<400> 4293

tggttgcaaa aactttgttg gcgaaggaca agaaattgta accgacacac tcgaagaggt 60

accacaatgc gatggcataa atgagcaccg caaccgctcc acgccaattc atccacaaca 120

ctacatcagc aactaagcct ttgtcgagaa cagcatgaaa ggatgagaaa ctaaggcaat 180

gccaaagattg ttagaagaat gaagaatgag ggggttagaa tcatcaatgg caggcttggc 240

cttgaaagaa aaaaaagacc caccagcca tccgaagggt tcctaaaaaa cgaataataa 300

ggagggggcct ggccattatt ttaggacctt attatcaatg gacttcaagg gcctgagaga 360

aaaaaaaa 368

<210> 4294

<211> 389

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4294

tagatgtagc ttttgggaga aaaagagcat gccaaactagc ttagatgtaa tacttgngga 60

aaaaagagaa taccagtcca attcctatgc caaatacaag tctcccaagc accaatacag 120

gaaaattagg agctaattgct gttacaagag ctccaacaag ataaactact gcagctccaa 180

tcagctcctt tcttctacct aaatataaaa tttgtcacag cagtttcacc agggaaggaa 240  
 atagcgaaga ttataactga caaaaaggga aattacctaa gaagtcagca acattgaagg 300  
 ccaacaagga gccaatgaag gcaccataca atgatccact agtctggaaa agaagcaaatt 360  
 gccattgccc cagtttatat tcaagatca 389

<210> 4295  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<400> 4295

tagagtttgc ggaagtccat aaggatcata cggcctttac cactcttttc actactacgg 60  
 aatatggatt caagggagtc catctttgat ctcttgtagg aatgccaatg gtgactaaag 120  
 gtactatgtc attgttggtt ataaggtgtt attgttgga gtacgtatta ctagcttgag 180  
 gtcgagccat taccttgaca tcgtagcat taaaaaaga tgtttgtgtg agctgacgaa 240  
 ggatattatg ggaactcaat tggatgtcca atgtatctca ctacatcaag gccaaacatt 300  
 gtatttttgt aaaagaacaa aacttgaatt tttgttgcat ttcaagagcc attgttaaac 360  
 atttcaacat caagttctat tattt 385

<210> 4296  
 <211> 376  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4296

ttgagccaat tcaaacgaca ataacttttt actcggttat ctgantgagt cctggaaaat 60  
 aacgagacgc tcgaaattga atgttgaacc tcagagcgaa ttcaaaccac aataactttt 120  
 tactcggatg tgtgattgag tcccgtata tatcgagacg ctcgaaattg aatgctttag 180  
 ctttgagcca attcaccga caataacttt ttactcggat gtctgattga gtcccgaat 240  
 atatcgagac gctcgaaatt gaatgttgaa gctctgaacc aattcaaacg acaataactt 300  
 ttactcggga tggctgaatg aggcccgcaa tatattgaga ccctcgaaat tgaatgttga 360  
 atctttgagc caattc 376

<210> 4297  
 <211> 307  
 <212> DNA  
 <213> Glycine max

<400> 4297

tgcttctata gccaaaagta catattcgat tgtattatta ataaagagga gtcaaatac 60  
 atctaaacag tgttttgtcg tttatattgc tgaaattgat aagacagaca aagggttcag 120  
 ttctcaatgg gaaaggaatc attcagccat aggacacgca tataggccaa ctattcttat 180  
 ttaaattaat gattttcatc atttggctaa ttgtaccctt ttaacggttt attcaagcat 240  
 aagacagtaa atggggccata ttaggcacgc tcttattatt taaaaaataa accattgaat 300  
 ttttgac 307

<210> 4298  
 <211> 202  
 <212> DNA  
 <213> Glycine max

<400> 4298

tcagaggaag agaaagggc atagaagtgg cgagggtgat acgggtaggg tttgggtttc 60  
 aaggaaatgg gtatggcgaa acgagaaaca cgacttcagt gtttgaaaag aaagagaagt 120  
 tgaagagaga gaaagtaaga gaagcatggg gaagagagga actgactgag aagaaacgag 180  
 gctgtagaat ggtctcttgg ta 202

<210> 4299  
 <211> 314  
 <212> DNA  
 <213> Glycine max

<400> 4299

cgtggaagac cgatgaacta tgaaggcgaa tgacacatgg aaaacgtcga acctgtgcgc 60  
 attcatcacc gtaaattgat ctgaaacgga ctcgaagcgc ctcagcacat actgacttta 120  
 ctgaatcaac actatcgac aaatgcgaac gagagagaat tgtctaacgg gctgaaccct 180  
 ttgacttcga cttgctcccg tatgtatagc aaactagggg agatgcttga cgaccagctc 240  
 gctcagacga gcagggttgc ttactccata aacaacagcc atcgggagga atcttcttga 300  
 gggcccaagt gggc 314

<210> 4300  
 <211> 394  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4300

gtattggacg ataactctgt cttgtgagan aagattttta aaagttctaa aatcacaact 60  
 caatcctctg tcttgtaata cttgtcttta cacaaatgaa tttgaccatc attaataaga 120  
 tgctttatgt gcgatgacat caacattaat attatgttgg ctgtagaaaa taacttaatc 180  
 gaggcataca ccgcaacaat gaagaggggtt tgattatcct tttagaactg caaagagata 240  
 aattgagatg atgaatgtaa gacaactgat tgcaaaatgc aaatgttcct tgcaaagacc 300  
 ccaaagggtg ggagaggaa gacctctgtc attcacaaca aaaggcataa gcttaatgct 360  
 tttccaaaaa ggactatttt attgttaatc tacc 394

<210> 4301  
 <211> 414  
 <212> DNA  
 <213> Glycine max

<400> 4301

cactatccac tactcaagct tgctctacat ttacattgat gtttgtatth atgggatgag 60  
 gttgtacgtc atttttgttt taagaatagt atcccactgg taaaactaac tttccaaatg 120  
 tttgccttcg caggaaatgg ccccgaggaa gcttgcttca aagaggtcca ggaaggacaa 180  
 ggcagcagaa ggaactagtt ccgctccgga gtatgatagt caccgcttta tgagcgcggt 240  
 acaccagcag cgcttcgaag ccatcaagggt gtggtcgttt ctccgggagc gacgcgtcca 300  
 gctcatggac gacgagtata ctgatttcca ggaggaaata gggcgccggc ggtgggcacc 360  
 actggttact cccatggcca agtttgatcc agaaatagtc cttgagtttt atgc 414

<210> 4302  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4302

actcaagcta gtagcacatt caaaccacaa taactnttaa ctacgtatgt ctgattgagt 60  
 ccggtaatat atctagacgc tcataaatga atacggaagc acgtaacaaa tgcaaactgc 120  
 aataaatat atactcagatg tccgaatgaa tcccgtataa tatcgagaca ctcgtaattg 180  
 aaaacagaag ctctaaacaa attctaacga caataacttt ttactcagat gtccgattgt 240  
 gtccagtaat atactgagac gcttgaaatt gaaaactgaa gctctgagca aattcaaacg 300  
 acaataactt ttactcggga tgtatgattg agtcccggag tatatcgaga cacttgaaat 360  
 tcagaacaga agctctgagc aaatttaaac gacaataaca tttaac 406

<210> 4303  
 <211> 397  
 <212> DNA  
 <213> Glycine max

<400> 4303  
 tctcatcctt agtaacagct actactggac acacacttct acatattgtg ttccctctct 60  
 gaatttcgga agtaatagtc ccttgactac tcttctaatt tctttccctc taatcctaag 120  
 ggatggactc tacacttttt gggatatctt ttacttaagc tccatagatg aatttattta 180  
 catgcactct tttagatttg aatctactaa ctccacctag agcgttttgg ctatagaagt 240  
 tccttctaatt aaggggttaa ttatctcact tgacattacc ctcaactttt ggcacttatt 300  
 ccttgcaatt ttctccttca aatttgaaca atttatatag tgatatggga ctagtcgttg 360  
 ttgtgaccat tggacgatga attcaacatt caaatgt 397

<210> 4304  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4304

ntgcttcttg ctcatgtagc gcgtctgagc agtcacttgc tgaatctccc tcgatcaact 60  
 tcacgcactt gcgaacaacc aataagttgt actcgcatca agatcctttg agtttctcta 120  
 acttccgcgg tggctctagc tgtggctgtg ccaatgggtga tcaccgcagc ggcgtctgtg 180  
 ctagtgggtg cagtggctga ggtcgaggag gcagctgctt cgtgaacttc caatttcaac 240

tggtacaagt atggtcacac tgcctatgtg tgccattatt ggtttgaaac aaactatcaa 300  
 cctagttcat ctcttgttct tcatgatcca acctcttcta actatggacc tcattctcag 360  
 aacaattttc atctggtcag aataa 385

<210> 4305  
 <211> 350  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4305

ntggagtttc caagtgccaa ttcgttttct tctttagtcc agtcttcttc tggcttcaat 60  
 tcatcagtgg gctttccttc tgtgtccagc atcttgggat gttcccagcc tttgatgaca 120  
 gctttccagg ttctgctatc cagtgatttg aggaaggcca ccatccttgc tttccagtat 180  
 tcatagttag gtccatctag gattgggtgg ctgttcaactg gtccctcttc tttctccatg 240  
 ttcatcagaa tttatctccc cagatctcac tctgtgattt cgagtgtgag ctctgatacc 300  
 aattgaaatt ctgataccag gggacagatg tcgtaccgga tgtcacgact 350

<210> 4306  
 <211> 386  
 <212> DNA  
 <213> Glycine max

<400> 4306

catcttctct tgagtgcgtc acatttgaat tctagctcca tgggtggtgcg agccttggac 60  
 ggtactcgtg aaggagagat gggggaaatc gacattccca tctctataag cccccacact 120  
 tgcaatgtgg cgttacaatt cataggcata aatcctgcct atagggtgtc tcttggggag 180  
 acctctgatt catgcgccag gagtgggtcca ctaaacactt caccacaaat cgaagtctgc 240  
 agtgggtgga cttttggtga tagtatcggg tgaagaagat atgtcgggtga tctgcccctc 300  
 ctctgccccca tacgtagaag cggcagaaga atcattggaa acggctttcc aatccttcga 360  
 ggtggtgagc tgcgcctctg tggaac 386

<210> 4307  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<400> 4307

ctggaaggat gcttcaatgg aggattatat agaggggttca tgatagacga tatgggggtgg 60  
agtcacctac aagttgatag tgaattataa tgagggggga ggaacgtata acttctgaat 120  
tgtgtctcat aagactttcc ttcattcagag ctacatctag tgtttcacat gcttctatta 180  
taaactaagt agcttccctt gaaaaccttt ctgagaaaac ttccttgaga agcttctttt 240  
gagaagactt ccttgagaag ctaaaactta gctactcaca cccctctcat tactaagctc 300  
acctccttga gaagcttgct tgagaaaata cctagagaag ctagagctta gcaacacaca 360  
cgtctctaata agctaagctc acctccttga gatgag 396

<210> 4308

<211> 383

<212> DNA

<213> Glycine max

<400> 4308

tcttagtttc agatgatgca gatggggttg tagctatctc atgcactcct ctaatgacta 60  
tggeatcatt tctggcgcta aactgctaag agttggaggc catcttctca attaaatatt 120  
tagcttcaac aggagtcatt tctccaaagg ctccacctct ggcagcatct atcactcttc 180  
tctccatatt actgagtcct tcataaaaaat attggagaag aagctgttct gaaatctgat 240  
gggtgggagca actggcacat agtttcttaa atctctctta gtactcatac aggtctcttc 300  
cactgagttg tctaatacct gagatattct atctgatggc tgtgggtcctg gatacacgga 360  
aaaaatcttt ctaagaatac tct 383

<210> 4309

<211> 340

<212> DNA

<213> Glycine max

<400> 4309

tttgggtcaat ctcaaaagtg gtgtcttcat gctgcaaatt gatgggttct gagtggaaaa 60  
tcctaatttg gttaagcctg aaattttgca gcatttgcaa agcagattca aattaattga 120  
agttatgtac gagcactgta gcttttacia aaataagcac tgcagcttat ttaaggcaca 180  
aattctgcag catctgcagt atgtgggtgg aaaaagggtg ggagtggaaa tttaaattga 240





<213> Glycine max

<400> 4312

tgggttcgagg tactcaccog ttgaagatcg aagaacgtat gaaaacgaat gaagaacgtc 60  
gaagaacggt tcaaaccttt gcgagattcc tcacggaaaa cgttacggaa acgttttcgga 120  
agcgccctcgg cttagatttt cttcacggaa ataatttttc caagcaaatt cgaaagagag 180  
agaagtgcct aaagggtcgg actccttttc ttcttcattt tctcccctat ttatagcaaa 240  
ataggggaga tgcttgccgc ccagctcgcc caggcgagct cagctcgccc aggcgagctc 300  
agctcgccca ggcgagcagg gttgcttctt ccagaagcaa cagccttctg gaggaacctt 360  
ctggagggcc caaatgggcc tgggtgctat ttgcaccc 398

<210> 4313

<211> 397

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4313

ntactatgca gagaatatcc aaggaaaata ccttcattctg acttagcatc aaattttcct 60  
aagttatctt ttccattatt taatacaaaa catttacaac caaagatatg aagatgtgag 120  
atgtttgggt ttctgccatt gaacaattca tatggagttt tctttaagat gggctctatt 180  
aaagccctat ttaaaatgta gcatgcagtg ttaacggctt cagcccaaaa atatttttga 240  
agaggtgtat catttaataa agttctagca atctcttcca aagatctatt tttcctttca 300  
acaacaccat tttgttgagg ggttcttggc ccagaaaatt atgcttaatc cctgcttacc 360  
acaaaataat tcaattttta ttttcaaact caccocg 397

<210> 4314

<211> 403

<212> DNA

<213> Glycine max

<400> 4314

tgattatcaa ttgtgtgctg tggtatggca atcagttgat ccggatattt tggatattct 60  
tagatcattt aaaacgagtc gttctttttg gaagaaagct caagaaattt ttgccaatga 120  
tattcagagc ttatttgatg caaccatgaa agttacagcc ctcaagccta ccagccatga 180



<210> 4317  
 <211> 316  
 <212> DNA  
 <213> Glycine max

<400> 4317

ttttctaaac ttttagtttg attaccaaga ctaagtcttt ccttactaga tgattaagag 60  
 gatgcatatt tatgtgtgca atcctaagat gccataaacc attcttattt gtagtatgct 120  
 tttgcacggt gagcaagtga ttaagatcac tctttccttt gtttaattat gcaaacatat 180  
 ctttaagata gaaaaaatca atttgcaact tcatacgttc agcatagtga tcctttttta 240  
 tatttttaaaa tttagtttgc atagacttgt tatcatccat gtttaaagaa atagtagtac 300  
 aattacaact agtggc 316

<210> 4318  
 <211> 345  
 <212> DNA  
 <213> Glycine max

<400> 4318

tggagggatt gatggggacc cgtgttgag aggaactatg ataagagcta cgtgggagta 60  
 cgtgagctca gttgaagggt ggcaactggg gatgggtgat ttatgtgtga tttgtggatg 120  
 tggatagtcg acttgcacca tcgcccgaacc gccacctagt accacatgtg acgggtaccc 180  
 cataatccta caagcttgaa gtgaggaagt gtggaagggg gagacttcct acttttattc 240  
 gttgaccata gagtgggtacc tggagatatg tcgcgggggg caggagacct tgtggacgtc 300  
 aagtgggggtg ctattgccc aaccaagct tgaccaatcc tgacc 345

<210> 4319  
 <211> 377  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4319

tggattnttg cttcttctct ctgatactg caacaactca aaatcacaat tcagttccag 60  
 tcatacatat tagaagccac agcagcttcc acagttgagt gaaaagcaca aagaagcact 120

agttaaaaat ttgagtgaag ggcacaaaga agccatagca ggttctgcta aagttagaca 180  
atgaaatacc ttaagctttc ttgaacctggc ctctgcttta gcattttcga ggtttaccca 240  
agcttggatt tttggttctt ctctctgata cctgcaacaa ctcaaaataa acactagtta 300  
aaaatttgag tgaaaggcac aaagaagcca caacaacttc cactaaagta cctcctcagc 360  
ttctacggct accgctt 377

<210> 4320  
<211> 332  
<212> DNA  
<213> Glycine max

<400> 4320

tgaagaggat gatttaatgg aggaaaagaa agacttaaga ggggagcacg aaattgaagg 60  
aatgaaagag ggagagaagt ggaactttga agtgtgtctc ataagacttt cattcatcaa 120  
agttacaata agtgttacac atgcttctat ttatagacta agtagcttcc ttgagaagct 180  
ttcttgagaa aacttccttg agaagtttct ttgagaaaac ttccttgaga agctagagct 240  
taactacaca caccctcta atatctaagc tcacctcctt gagaagcttc cttgagaaga 300  
ttcctaaaga agctagagct tagctacaca ca 332

<210> 4321  
<211> 397  
<212> DNA  
<213> Glycine max

<400> 4321

tatccttatg gcttgcctcc ggacttcacc ccccggtcca ccccggaaga gttaagccaa 60  
gcccccttctt ttgaggggca actcccacca tatgaagagt atcccgggca agacgatggg 120  
gaaggagata cccatcttgg cccctgctc cacctcaaag atccgtcccc gcatgaacta 180  
ccccaaccaa acatagtccg tcataccccg gcctcaccga caccctaaaa gaatctattc 240  
cctttgcgga agataaggga aagattgagg tgcttgaaga aagggttgaga gcagtcgagg 300  
gcctcggcaa ttagccattc tcggatttag cggatttatg tctcgtgccc aacatcgta 360  
tccctcccaa gttcacagta ccggactttg ataaata 397

<210> 4322



cacaaaaaag ttattagtga caatttccaa cattatttcc aattactggc tatgaaatat 180  
aagcatagaa taaacaagtg ttaatacctc aaaaacacca ttagaaatct ctaagatgga 240  
cacatcaaat gttccacctc caagatcaaa aactgcaatg agaccctcct tgttggtcat 300  
cccataggaa agtgcagcgg cagtgggctc attgatgatt ctctgaacat caagaccagc 360  
aattctaccg gcatcttttg ttgctgctc ctgagcatca tt 402

<210> 4325  
<211> 315  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4325

tggaatacgc ggagatcttt cttgcatatg aagttctgct ttgatatana tgtctaatagc 60  
aaatggaagg ccattgaatg ttattcttgt gggaatactt tgatgagata gcttgaaaaa 120  
ctagcattcc aaacatttta atgtcagctt gttatagcat gatgtgcttg ctactatttt 180  
tgagttcttt gacccttcga atggcctaac tatcttttgt tttgttcata agagcttggt 240  
ggaattctat catgggcttt tgagcactgg tctcatgtca tttggaccac tacaacataa 300  
cctatcttca aagca 315

<210> 4326  
<211> 384  
<212> DNA  
<213> Glycine max

<400> 4326

tctttaggac cttgaacaag caatttactc ctctttcaga accatgctat gtgctcgcga 60  
ctgggtctctt tcttccctcc gcaacttgag ttcactattg ctaccccata gagctccgcg 120  
aaatttggtc cggccatact cttccttgcg agccctcttg gtctcttggt caagggctct 180  
tgcggttaatt tcattctctt cccgtaaccc ggcacactcc ttccgaacgt gtgtagcggc 240  
caacatgata ttctccttgg caagttttgc ctttcctaac tcgcttttga gagcttggac 300  
ttcttcgtcc tcttcggtg cttcaaaaact ctcttcgctg acgactttta acttggcgag 360  
ccaatctaaa cctcgatat gaac 384

<210> 4327  
 <211> 389  
 <212> DNA  
 <213> Glycine max

<400> 4327

tgagatgagg aagtgtagaa aggtgaaacc tgtgatgtac ctgtgatgta cctaagcagg 60  
 caagctcctg gcagtcaaca gataaaagga acaaagacca caaagcaagg aggcttgtgt 120  
 ggtggctggc cagctgtgaa tcttgtgtga tatatgggtt atggcctctg gtaatcgatt 180  
 actaaggggtg ggtaatcgat tacaaggctt aaaaatgaag acaggaggct aagatgggtct 240  
 ctggtaatcg attaccaagg gttgtaatcg attaccaggc ttgaaaacga ggtcagcaag 300  
 ctatgggggc ttctggtaat cgattaccaa gggggtgtaa tcgattacca agcttagaat 360  
 tgaaggcagc aggttgtaga ggctcttg 389

<210> 4328  
 <211> 383  
 <212> DNA  
 <213> Glycine max

<400> 4328

tcttgtaccc ccgctccctg cagtatatac acccgatgca tcttccttcc aaatccactt 60  
 gtcttctcga tccggatgga tgctgatacc ttctagatct tctaagaact ttacagccat 120  
 ctccatcaca ccatcgaaaa gttgccttct ccatttaaag tctcattccc aacctatagt 180  
 tgtgaagttg cccatcatct ttatgacatg ttgttgctgt ttggaaatgg agaaaagtgt 240  
 aaggatatttc aacttaagtg gtactccatc ctcttccat ccatcctccc aaaatttgct 300  
 cttttctcca caccctactt tccattttat cctctatcg aaaccgctgc catctgcatc 360  
 taaaggatct atgatattta tat 383

<210> 4329  
 <211> 391  
 <212> DNA  
 <213> Glycine max

<400> 4329

tgaaagtgca taccacacca tttttcatag taaaacactg gtaatgtgtc tactattatt 60





<210> 4332  
 <211> 385  
 <212> DNA  
 <213> Glycine max

<400> 4332

ttgcggattt ggtcttcgct ggcgaaatga tcgaagtggg tctaaaaaga ggcaaatctg 60  
 atcatcatgc tttgataaat gcaaaaaaaaa aaattggggc aagtgaagag ggtgagaata 120  
 agggacaaac ccatgctgtg actgccattc ctatacagcc aagtttccca ccaacccaac 180  
 aatgtcatta ctcagccaat aacaaacctt ctccttacc accacccagt tatccataaa 240  
 ggccatccct aaatcaacca caaagcctgt ctaccgcact tccaatgatg aacaccacct 300  
 ttagcacaaa ccaaaacacc aaccaagaaa tgatatttgc agcgaaaaag cctgtagaat 360  
 tcacccaat ttccgtgtcc tatgc 385

<210> 4333  
 <211> 460  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4333

agatggaggt tttntttca ttagtcatcg atganncgct agacnagcaa gacncacgct 60  
 tgctaggtng acggtctaag ttcagattgg aggcatttca tccacgtttc taacttgagt 120  
 accggcagcc gcttgggggt gaggctaggc aagatcccta ctgggaggat aagggtgccac 180  
 ctctaggctt agttcataac attgtcatgc tagcatctga tctaccatta ttgtcacaat 240  
 cacaccagac agagtgggga ataccaaatt cggatgcaac gtggaaacta tttgtacaat 300  
 cctaataaaa agtctactgc taatcaaagc aaaatatgac gtatttgcac caagcaaaga 360  
 ataagttatt cattattctc ctgcggagta aaccataacc tggaggagat cattaagacc 420  
 ttgttggccg ttttttttac taagatacta cattcccagt 460

<210> 4334  
 <211> 186  
 <212> DNA  
 <213> Glycine max

<400> 4334

tgcacttcaa tacaatgctc gattgaagga tttgtttttg agcttaacga caacctcccg 60  
ggagccacct tcgtccttgc caatgtgtat gatttagtgc tggaactcat aaaaaattat 120  
gataaatagc ggaattaaac atgcaatccc ttccattgga ttttactttt tatatgaacc 180  
attata 186

<210> 4335

<211> 371

<212> DNA

<213> Glycine max

<400> 4335

ctcaagctta acaaaatata aatctaggag cttctaccta tgtattataa acaaatttaa 60  
attaaaactc atggagaggt tagtaaggga actcagaaaa atagccccgt aaaataaaac 120  
tcatgggggtg cctcctcaca aaggggggtcg cagtgaccag gcttgggcga ctggttatca 180  
aaaacacagg tggtcacaaa ggcataagat catttatggg ggcttagatg taatctggaa 240  
tatgagagat gtttaatgaa aggaaaatgg actccatttg gataaaaata actactttct 300  
ttagacgect tttttttgcc tagattcttc acaacctatc taagtgggta agctactttc 360  
cgcgttttat a 371

<210> 4336

<211> 382

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4336

tatgcgcata tttccttacg aacgttcact tgcacttgac attctattaa ccaaaaaatg 60  
cacccatata caatcaaggc agctttgtta cctagattat ttacatgcac tcccaagggtg 120  
tacttggttac ttacatcaca cacatctcct tggctgaatt tacatacatg cacactcaaa 180  
gcatttcagg gtacccaaaa attgcacatg cgctcatctt ggtatctcta atacctatac 240  
atatacaaac ttcatgatga atcttgacta cctacacaat aaggtgctac atttcatgcc 300  
tttttttttc aagtttttac tacctaaagc cgtgtcatac cctaatttcg tccgnggacc 360  
tttgctcgat gacgtgcgac ca 382

<210> 4337  
 <211> 383  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4337

tgctntcaca gttcactctc tttcataaat taggccttcc tctctttcac tccctctctc 60  
 ctctctttca ctctctctcc tcattaggcc accaccagcc gattgcaaac cttccgtgca 120  
 atactggaga ttgtggaccg gaagttcggc tgtgtgtgca atgtgctggc gtatggcggc 180  
 ggcgcaagcc aacatcagca gcagcaccac gcgttccaaa ggtgttcaag gcgtacatga 240  
 ggctctggaa gcaccagcag gagaaccgcg cgaagttggt ggagtgcggg ttgaagcagt 300  
 gggaacttga cgagatcacg agctgaatcc aacagctgta ctttgggcag tacctgagga 360  
 gcagtgagtg caagttcctc ggc 383

<210> 4338  
 <211> 352  
 <212> DNA  
 <213> Glycine max

<400> 4338

gtgtgatcaa caagtaacca tgcgttttgt ctccagactt taaagaagcg ctactaggag 60  
 gcaacaaaaa attttctacg aagaagcttc ctgcgtagtg gtctatgtag ggcaccatta 120  
 aagaggattc tagtgtgtcc ccacaagctg acacaggctt tgacatactc catatatgga 180  
 gcgtgggaca ataattacat gggggggcaa taaagtgttc tcatttctat acagagacag 240  
 gggcagctga gagatgatga ttttcgcact ttcttggagg aggtggagct tgacaacagg 300  
 gatcgtcaaa cttgtgattt attcttcatt aatgttcgca atgtctctat ta 352

<210> 4339  
 <211> 355  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4339

tgtaaaccce ctagagcttg gacaagtatt gtgcgtgtct acttctgtca agntatccgg 60

ggtggacatg cttttggttt tacaagtaag gtctaacgtg tttggtgagg gaagcctcta 120  
tatttgacaa ctctgccctt gtctgaccgg tagagagtac attgaataca aatgttatgc 180  
tttttctatt acgacaggtg tgtgcgggcg tcgcatagca ctctgtcata tgtatcactc 240  
atggagtggg tacgtactgg agatgtgatc cgtgggtgag aagggttgtg tcatggtgca 300  
taaaaataag acaccgaatc agcttccgcc agttaccaa gagtccattt aaatg 355

<210> 4340  
<211> 353  
<212> DNA  
<213> Glycine max

<400> 4340

actaaaaact cgcgtttgca ctccactcat atcggccttg acttaatctg actaacacca 60  
tcgacatagc ggggtgtatt atggacctca tatacaaagg cttctttgaa caactctgca 120  
atccttcata cataggcgca tgtgcttggt gtaaagactc ttggtcaaag gcacgtatca 180  
tatcccccaa gtggactccc cattctacat caaacggttt atattgggac ccactctcga 240  
tgtatgtcat attaccaagc catatacacg ctggtgaatc gttctaatec catcacacaa 300  
tagatgctcc cgttctgtgt ccagaatttg togttttcca ttcaaacaat tga 353

<210> 4341  
<211> 262  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4341

gtgatggtgt agatatgaaa tcacatgtnn ggcattatta aaaaggggga gaatgtgaat 60  
gtgtgtatac atgattttga tgatgtccca tagaagaatc aatcagcgct cattttgctc 120  
taagattcat tcaagatctg ttcatcaaac ttattctnga ctcaagatta cttttagatc 180  
aaaccttgcc tcacactgaa aggtttcaag tcattctaag aacatgttat ttattaccaa 240  
tacatgctat tgattaccaa tg 262

<210> 4342  
<211> 294  
<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4342

agctntgata aagaaggcga tgggatgttc ctattgtgac aaaaccgccc ccattccgac 60  
tctcaacgcy tttgtttcca ctgtgaatgg aaggctgaac tcatgcaagg ccagcacagg 120  
cgccgtcgac aatgcatgtt tgagattgtc aaaggccaaa tgagctngcg ggggccagt 180  
gaagggatca acantgatga actagactaa cggagttgca atcgttgcat atccactaat 240  
gaagcgacga taaaatccta ccacactaan gaagctttgc acagctttta tgga 294

<210> 4343

<211> 432

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4343

ntgaggctga ggacttatat aacagtatca aggttnttgt ttttaagagtt tttggagatg 60  
agaataattc taggatttta gaattccagt ttttactatt catgcgcact attcacgtag 120  
aataaaattg attttctgca attccatttt tgcttcaatc tacaatttcg ttttctactg 180  
attaatggaa agctaagtct ccagcggtgt tttctcttga ggatcaaaca catctctctt 240  
tgagggtttg ttattactat tgaattctaa tcagttcttt cttcttcacc aattactctg 300  
tatttggtgc tattaatcca tgcattgctta atgcttgatt aattatctct gcgcttaatt 360  
tacattcatg cctaattgatn caattcggtc atgattaatt gngtatgtg tngcttaatc 420  
acataatgac aa 432

<210> 4344

<211> 387

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4344

agtcacctga ggctgcagct ntcactacat catttagaag cgttcaagag ttttagaggc 60  
gcctaactgg ggcggataca ttctttcctt tgggtagagg tgcattcgga atgtgcaaaa 120  
gagcattggg actagaaaat atgatgtatg gcaagatcta tctcagagga caacaggcta 180



<211> 217  
 <212> DNA  
 <213> Glycine max

<400> 4347

ctcaagtgcc acagatcatg tcacagcctt tcttccttta ttctctttat gcaagaaaat 60  
 aaatcctata atgggtagga ttctcactgg tcacacagtc actgcaactt atgcatgcag 120  
 aattcagttt ctacagtttct atacctagaa gatattctat acatacctaa ttgtcattca 180  
 atgtgatctc agtatccaag ttggatttct tctttgc 217

<210> 4348  
 <211> 405  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4348

agcttttatg tgaaaggatg tgactcttca cttttgaatt tcaacgttca aaggcactgg 60  
 taatcgatta ccaaaacatt gtaatcgatt acagcttttt gaaattaatt ggaatgttgt 120  
 aaattcaatt tgaaaacttt ttcaaaatag ttntgctact ggtaatcgat taccagagag 180  
 taaaaactct ttggtaaaca ttttttgaga aaaatcatgt gctactcaat tttttagaaa 240  
 aactttttat acttatcttg attaagcatt ctcttgattc ttgaatcttg agtcttgaat 300  
 cttgatcttg atttttgaga tcttgaacct tgaatcttga ttcttgactc ttaactntct 360  
 tcttgagtct tgaattcttc ttgattctta tcttgaactc ttgaa 405

<210> 4349  
 <211> 316  
 <212> DNA  
 <213> Glycine max

<400> 4349

tgaaggtaaa ctagatgcct tggttaacct ggtaacccat ctggccttga atcaaaaatc 60  
 tacacctgtc gccagactct tgggtttatg ctctctgtcc gaccaccaca cagacctttg 120  
 cccttctatg caacaatcta aagcaattga atagcctgaa gcttatgctg caaacatcta 180  
 caatagacct tgtcatacc taatttcgtc cggggattat aatttgatga tatacaacca 240  
 ttgattgacc gcttcgagat gtttggcacc ctttggttga caatatgtga agtcccgaga 300

cggtgtcgaaa atcaaa

316

<210> 4350  
<211> 412  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4350

agcttggtcc ttggtagttt aaacttatcc ttgcatcatt ttctgtcttt ggaaccacca 60  
ttgtatgttt tacgcttcct ttggaaaacc ctagagaaag agactttgtc aaagctatcc 120  
ttttctgaaa tgggtgttat ttctgtgacc ttcatgaac tccgttcgca ttgacgtgat 180  
tggaatttca aaatgatgct cttttttag aaccgtaat accccttagc cttttcatgt 240  
agtgacatga gtatttgact caggggtatcg ttgtcaacat tttttctgaa atccgtatga 300  
agtttcttcc attttgacgt atagagacta gcgttggacc gacaagcgtg aacgaggaag 360  
agacctctaa gtgacgcaca gaggaacccg gcgngagct cacaataggt ga 412

<210> 4351  
<211> 423  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4351

gtatgcccga gtcattcatt catatgagat gttgttgaag tattggcgat cagtattgcc 60  
attccttgga ttatagggtt gaaccaagct catgctttta taaaagggt cattaagtca 120  
agttgaaata tggaagtaac cgtcttgcaa aattggggca aaagatgaat cgagtcacat 180  
cactgcttcg tctactgcca aacatattta ggattattga tgccttggtt acatccagtt 240  
tcaccttgac aaagatgtca tggaccatgt tgaaaatcta aattgattca accccatata 300  
ctgcgtaaaa attcgcaata cttcaactgt acatcattcg catacatcca tgcttttcat 360  
tggttgcatt gtcattgca ttctttcctt gaaaaataaa atanaataaa atgaacttaa 420  
tca 423

<210> 4352  
<211> 331



<212> DNA  
<213> Glycine max

<400> 4352

agcttcccgat atccatactt ggaaggatct aattactgcc ttcctaaggc aatatcagta 60  
taattccgat atggctcctg atcgactca gctgcagaat atgttcaaga aagagggcga 120  
aacctttaa gaatacgcac aacggtggag agacctggca gcacaagtgg ctctcccat 180  
ggttgagaga gagatgatca ccatgatggg agacactctg ccagtgttct actatgagaa 240  
gctagtaggt tacatgccgt ccagcttcgc ggacctagt ttcgtcaggg aaagaatcga 300  
ggtaggggtg aaaagaggaa agttcgatta c 331

<210> 4353  
<211> 393  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4353

tactcccgct taataagtgc atntgatgta gctccatgta gagctttag gccttggatc 60  
ttcttcatca atggagtcct ttgcttcttg aatatcaatg gtagcggaat ggagaagggg 120  
gaaaggtgat tggagacgcc acgtcaagga gaagatgagt caagaacaag ctcaccacca 180  
tatgaagcca tggataagag cttgaacgta agagaagata aatagaggga gagggagaga 240  
aggggcacga aatttatgcc tcaaagagg tatgacctt gaagtgtaat ttctcanata 300  
atcaaagttg aaaattgcac acacatggcc tctatttata gcctaagcgt tacacaaaat 360  
tggagggaaa tttgaatttc tattcaaatt tca 393

<210> 4354  
<211> 401  
<212> DNA  
<213> Glycine max

<400> 4354

agctttgagc caaaatcctg actcaccata aaccttgacc cagggtgaga atgccaatcc 60  
ttaccctcgg aagcaaaaaa agaataagg ggaaatttcc gatcaaagaa aaagagaagg 120  
aaaatttcca atgaaagcaa aaaagaaatg aaggaaaatt cccaatcaa agagtgggag 180

aaagcaaaaa aaggaaaaga aggaaaattc cccaatcaaa gagtgggaga aagcaaaaaag 240  
 aaaagaaagg aaaattccca atcaaagaat gggagaaagt aaaaaaggaa gaagaagaag 300  
 gaaagaaagc tctgatcaa ggatcgaaag aaaccagaag aaatgtgcag agaggtcttt 360  
 ggaccagaca atatctgaac agtacagaat tgtcccaaat g 401

<210> 4355  
 <211> 421  
 <212> DNA  
 <213> Glycine max

<400> 4355

ttagaaaaatg atttctatac caaagttagt cgtataatgc aactaacaag gatgaagctt 60  
 taagtgtgat tcttttcttt ttcttatcat tctcctcatg ttgattcagt ctcatatagat 120  
 ccatttcgtg ttctataac ttccaaata aagttgcaag agacatgtta gaaagatccc 180  
 ttgattctgt aatagttggt acccttggtt gtcattccct acttaaacat cttagaactt 240  
 tattaataag atcctcattg ggaaatatct ttctaatga tgcaagatga ttactatgt 300  
 gtgtgaatct cttttgcata tcatgtatag ttctatttg attcattcta aacaattcat 360  
 attcatgggt taaggatatt attctagacc cttttacatc tatgggtcct tcatgggtta 420  
 c 421

<210> 4356  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<400> 4356

agctatgctg atttagtttt cgctgatgaa aagatcgaag tgggtctgaa aagaggaaaa 60  
 tttaatcatc ctgcttgac gaatgagaaa actggggcta atgaagagg tgagaataaa 120  
 ggagaaaccc atgttgac tgtcattcct acatggccaa acttcccacc agcccaaaaa 180  
 tgtcattact caaccaatat cagctcctct cattaccac caccagtc tccacaaagg 240  
 tcatccctaa atcaaccata aagcctgtct accacacttc caatgacgaa caccaccttt 300  
 agcacaaact aaaacgcca ccaagaaatg aattttgtag caaaaaaggc tgtagaattc 360  
 accccaattc ccgtgtccta tgctgacttg ctcccatatc tac 403

<210> 4357  
 <211> 357  
 <212> DNA  
 <213> Glycine max

<400> 4357

tgtatagttc cccaatctat gggtatatttg tagtcaagaa cactcaatca tccataaagg 60  
 caacccttaa atcagccaca aagcctgcct gccgcacatc cgataccaaa caccaccctt 120  
 aacacaaaacc aaaacaccaa ccagggaagg aattttccag aaaaaaagcc tgtagaattc 180  
 accccaattt ccgtgtcgta tgctaactta ctcccatatc tactcaataa tgcaatggta 240  
 gccataatcc cagcaaagat tccacaacct ccattttctt gaggatacaa cttgaatgca 300  
 acatgtgctt atcatggagg agttcccgagg cattccattg agcattatat gaccctg 357

<210> 4358  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<400> 4358

agctataaaa atattttctca cccataacta attaaaaaga gatttatgta tatttattta 60  
 aatgattatt atgaaaaaga aatattagta ttatttttta ttttttagc tcaacaagag 120  
 tagtctggta tttctacgta ttttcacgag caataaaaga ataagagta tggtgtaatt 180  
 cttttagtaa aatatttgta aattgatatt tttatattct taattttgtt ataagctttt 240  
 ttgtttactt aattatgaaa tttttattgt ggcagtaaata taaatttgat ttaataggat 300  
 caattaaaag agaagtttta aaacaatcaa tcgtcacaca acttatgttt caacatctca 360  
 aaattaaaaa gatgtcaca 379

<210> 4359  
 <211> 363  
 <212> DNA  
 <213> Glycine max

<400> 4359

tcatagctaa tattagtcaa tgtcaaccta gatatactca ccaatatatt acaaaatttg 60  
 acattcataa atgtaactga cttttgattc atataacttg tgaaattata agaaatgact 120

[illegible]

<400> 4360

<400>	4361
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1860

<210> 4362  
 <211> 218  
 <212> DNA  
 <213> Glycine max

<400> 4362

agctattgcg ataacttcat gtgctactca acgattggaa gaactttttt tttgtactta 60  
 tcttgattga gccttttctt gattcttgaa tcatgagtct tgaatcttga tcttgattat 120  
 tcttgattct tgaaacttga aacttctctt gattcttgaa ttgatcttga ctcaatcttg 180  
 aaattattct catgggcttt ttgacatcat ctctgcta 218

<210> 4363  
 <211> 414  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4363

tttcgcaaat cttacggttt tatctgagat ctagccatgc gagaagtatc cacagaggcc 60  
 aattcctccc ttcccagta ttatgatcag ccgttgagat gctttacctt tggggacttc 120  
 caactgtcac ccatgggtga agaatttgaa gagatcctat gatgtgctct acggggaagg 180  
 agaccatacc tcttctcagg gttctatccc ttattagcta gaatttcaaa gatagtccaa 240  
 atctcggcac aggaattaga ccatggaaaa caagtcacaa atgggggtgg tggaaataccg 300  
 agaaaatggt tggaggcaaa agcaagaacc ttggcaggta gaggcgaatg agccccgctc 360  
 atagacattc tcgcactggt gatcttcnga ggagtcctct ntcataatat ggat 414

<210> 4364  
 <211> 102  
 <212> DNA  
 <213> Glycine max

<400> 4364

agcatttgac ttactatacc aagctctatg aaccaggggac ggaaaaagat ctatatttac 60  
 gcttgctcac ggtatacaga ggaaaactag acatttggat ca 102

<210> 4365  
 <211> 399

<212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4365  
  
 tgaaccagaa ccggtgagtg tgtgacctta aactgcgagt gaacgactag ctatgagtaa 60  
 gaatctttgc atgaatctct gaattttaga atgaaatgta taaactatga catgatgaag 120  
 accataattg tgcattacaa gccttttgac caaaaagctt accttgaatg ataattatat 180  
 tctctgcacc ctttttgagc tgaatgatat tgtcaaaaat ttgaaccctg aacttaaata 240  
 aatgtctcct gataccttgt ttagattcta tgagagcata tggttcaagg caaaattacc 300  
 ccaaantnlgc gggaaggga ctaattgcga tgcaaagaaa anaagagaaa gcatcagcnc 360  
 acacaacaat taagttgtat ggtaaaataa acagagaga 399

<210> 4366  
 <211> 378  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4366  
  
 agcttagcat gacctccgag atacaagcca tttgatcttt aaaggtcgat agggcggact 60  
 tcatctgctc ttgactccc tcttcattat ccattgttct ggatcgagtg ttataggggt 120  
 gcctctgcac tttcttagtt attgtgagtt ccctacagaa acagacaatg gtgagtatgc 180  
 caccaaaaca tgaatatgct catgaattat cggagcactt ggatccacct caagattttt 240  
 acataacgtg aagagtttca gaacttctcg ttgtataaaa aggaacaaag cttttatcta 300  
 gccaatatca tacaaaagtg ttacaacaaa acctaacggt ttctaattat atgggccatc 360  
 aaatctatca tgtgttga 378

<210> 4367  
 <211> 355  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4367  
  
 tgtagggacc accggnacga atagcatcaa tggtcttggt cagtgaagca tggtcaccca 60  
 ccaacgagtt tgaagcaacc ttcatttctt ccatttgcaa atctttcccg cgaacagaac 120

tagaatatga aaccctttaa cgagaaaggg tgataatgat taatagaatc ataaaaggaa 180  
aagaaaaata caaacgttaa catatagatg tgcaatacag atgaggggtct tgaattatta 240  
tttacctgga acctacacat atatgtattg ttgcccatga tggcccttga ggctctgaat 300  
gggctttcga ttaggggtttt tggagcagaa cacaatccat aagctagcca cgaca 355

<210> 4368  
<211> 421  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4368

agctntataa gcaaaaagta aaaatctatc atggcgaaaa gctatcaaaa aggaattttt 60  
agcttggtca acaggtattg ttatttaatt cttgattaag attgtttcca agtaagctga 120  
aatccaagtg gtctagacca ttcatcatca aagaagttat gccatatgga gcagtgatat 180  
tggaggaccc aaccaccaa aggacatgga ccgtgaatgg tagaagaatc aaacactacc 240  
taggtggaga tttcgagagg ataactactg ttgtccagat gcaaaaggct tgaaccataa 300  
cgaagacgtc caattataaa gacgttaaag aagtgtcttt gggaggcaac ccagtgtttt 360  
ttaaactttg tcttaacttg tgttacttta atcttatgcc ttatatatct aanacttact 420  
t 421

<210> 4369  
<211> 362  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4369

tctccccaat ttctataaat agggggagat gtgatgtata anagggttct gcccttagg 60  
catttctctc tctttcgaat ttgcttagga aaattgtttc cgtgaagaaa atccaagccg 120  
aggcgctttc gtaacgtttc cgtgagtgat ttcgtgaagg ttttcgaccg ttcttcattc 180  
gttcttcate gttcttttagt cttcaacggg taagtacctc aaacctagct tttcaattca 240  
ttctatgtac ccgtgggtgg ccacaattgg ttcatgtat ttttattctc gnttcattta 300  
ctttttatac ccccttttga cgtgcttaag ccattntatt taagtcattt ctcgcttaac 360

ct

362

<210> 4370  
 <211> 409  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4370

agctttataa gcaaaaagta aaaatctatc atggcaaaaa gctatcaaaa aggaattttt 60  
 agcttggtca acaggtattg ttatttaatt ctgattaag attgtttcca agtaagctga 120  
 aatccaagtg gtctagacca ttcacatca aagaagttat gccatatgga gcagtgatat 180  
 tggaggaccc aaccaccaa aggacatgga ccgtgaatgg tagaagaatc aaacactacc 240  
 taggtggaga tttcgagagg ataactactg ttgtccagat gcaaaaggct tgaaccataa 300  
 cgaagacgtn caattataaa gacgttaaag aagtgtctt gggaggcaac ccagtgtttt 360  
 ttaaactttg tcttaacttg tgtactntaa tcttatgcct tatatatct 409

<210> 4371  
 <211> 364  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4371

tctcccncaa ttntctataa atagggggag atgtgaagta gaanagggtt cggcccctta 60  
 ggcattttctc tctctttcga atttgcttag gaaaattggt tccgtgaaga aaatccaagc 120  
 cgaggcgctt ccgtaacgtt ttcgtgagtg atttcgtgaa aggtttcgac cgttcttcat 180  
 tcgtttcttca tcgntcttta atcttcaacg ggtaagtacc tcaaacctag cttttcaatt 240  
 cattctatgt acccgtgggtg gtccacaatt ggnttcatgt atttttaatt ctcgttcatt 300  
 tactttntat accccctttt gacgtgctta agccatttta ttaagtcatt ttctcgctta 360  
 acct 364

<210> 4372  
 <211> 374  
 <212> DNA  
 <213> Glycine max



<400> 4372

agcttcttat accaatgtca cgaggagtgt ggtagtcaga ttcatacaaga aggagctaata 60  
ttgtcgcgagc ggactcccta ggaagatcat cactgacaat ggcaccaatc tgaacaacaa 120  
gatgatgtag gaaatgtgag aggatttcaa gatccagcat cataactcca ccccttatcg 180  
tccaaagatg aatggggctg tagaggctgc aaataaaaat attaagaaga ttgtccagaa 240  
gatgaccgtg tcatacaaag attggcatga gatgttgctt ttcgccctac atggatatag 300  
aacttcagta cgaacttcta ctggggcaac gccgtattcc ttggtttata ggatggaagc 360  
aataactcta tttg 374

<210> 4373

<211> 344

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4373

taagcctcca gcttgcttgg gcgagctgng cggcaagctt ctctccatt ttccctataa 60  
aatggcgctt gaggcttgag ggaaaggggt cagccccctt ggcaattaga tttcacttaa 120  
aattagttag gagaagaaaa aagaaggaga aaatccaagc tgaggagctt ccgtaatgct 180  
tctgggacgt ttccgtgatc aattccacta acgttcttca ccattctttg tcgntcttta 240  
ttcgntcttc atcctttggt gatcttcgac cggntagttt tcgatttcga agctttgaat 300  
tcattctata cacccttagg ggtcaattct cgctttgggt taaa 344

<210> 4374

<211> 412

<212> DNA

<213> Glycine max

<400> 4374

agcttggaga agatgcttca atggaggtat tgaatgaggg agagaaatag agagggggga 60  
gcacgaaatt gaaggaataa aagaggtata gaagtggaac tttgaagtat gtctcacaag 120  
actctcattc atcaaagtta caacaagcgt tacacatgct tctatttata gactaggtag 180  
cttccttgag aagctttctt gagaaaactt ccttgagaag cttctttgag aatactttct 240

tgagaagcta gagcttatct acacacaccc ctctcataac taagctcacc atcttgagaa 300  
gcttccttaa gaagattcct aaagaagcta gagcttagct acacatacct ctctaatagc 360  
taagctcacc tccttgagat gagaagctag agcttagcta cccaccccct at 412

<210> 4375  
<211> 403  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4375

ctcaagcttg agatgaggaa gtgttgaagg gtgaaacttc ctgcttttat tgntgactca 60  
cagagtggta cctggagata tgtcgcgggg gtcacgagac cttgctgacg tcaggtgggg 120  
tgctattgcc cataaccaag cttgaccaat cagcaccaa cccgggcata gtctgtcagt 180  
gagaacctgt gatgtaccta agcaggcgag ctctggcag tcaacagata aaaggaaaac 240  
acgaccacaa agcaatgagg cttgtggtgg ctggccatct gcgaattttg tgtaatatgt 300  
ggatcgaggc ctctggtaat cgattaccaa tggtggttaa tggattacaa ggcttataaa 360  
tgacgacagg aggctaatat ggtctctggt aatcgattac cac 403

<210> 4376  
<211> 388  
<212> DNA  
<213> Glycine max  
<400> 4376

agctaggaga agatgcttat tggaggataa gaaagagga gagaaagaga gaggggggag 60  
cacgaaattg aaggaataaa agaggtatag aagtggaact ttgaagtatg ttcacaaga 120  
ctctcattca tcatagttac aacaagtgtt acacatgctt ctatttatag actaggtagc 180  
ttccttgaga agctttcttg agaacactta cttgagaagc ttctttgaga aaacttcctt 240  
gagaagctag agcttaccta cacacacccc tctcataact aagctcacct tcttgagaag 300  
cttccttaag aagattccta aagaagctag agcttagcta cacatacctc tctaataagct 360  
aagctcacct ccttgagatg agaagcta 388

<210> 4377  
<211> 282

<212> DNA  
<213> Glycine max

<400> 4377

ggtacctgga gatatgtctc gggggtcagg aaaccttggg gacgtcaagt ggggtgctat 60  
ttcccaaaac caagcttgac caatcccgac ccaacccggg catagtcggt cagtgagaac 120  
ctgtgatgta cctaagcagg cgagctcctg gcagtcaaca gataaaagga aaacaagacc 180  
acaaagcaag gaggcttgtg gtggctggcc agctgtgaat tttgtgtaat atgtggattg 240  
tggcctctgg taatcgatta ccaaggggtg gtaatcgatt ac 282

<210> 4378  
<211> 408  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4378

agcttgggtg ggaatcgata ttggggaatg ccatgtgggt tcgngnatth atagactaag 60  
aaatggaaat ggctttggat tttggattcg gcttattttt caactacata agggtttacg 120  
ttatggaagc taggatatga gagattgaga cgaacggatc tctatggtac gtacacactg 180  
acttttgctc catacaggct tgtaccaga aggtttacga atgtacatgt catttattat 240  
gtgagtacgt gtattgaata tgctagctct taaatagtag gataataata tgtaaagacg 300  
attaatagtt atatcttttt tttcgatacc tgagtaatac gtcctatttg tttctagatc 360  
aacattatat gttatatcaa gtagccatag accacgttta cgtataaa 408

<210> 4379  
<211> 465  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4379

ctgancctga tgacgcgtcg taaccgagac ctataaaact cagctttaac cgccccagag 60  
aggacgtgaa ttctataaga gctttgacgg ttgaggaggt taatggggtt caaagttgct 120  
taggagaaga ggaaccgagg aagaagaacc agccatgacg cgctaccgaa tcgtgactga 180  
gatcattccc tacatgcgtt tcatggctcg tgattctcgc gcaacaatcg gttagttttg 240

tgcggtgga tagcgatatga tctatgttct catacgggtc ctctccgga tgatgtgcat 300  
aatcagcttc acgtctatca ttggtaatct cttacttat ttgtaccgt tatgataact 360  
gaacactagt ttcgtaaagt agtctttaat gagactgaaa gctaataaca ataccagat 420  
ggaccgactc ataattggac ttctctctc agaaagacac ttgat 465

<210> 4380  
<211> 354  
<212> DNA  
<213> Glycine max

<400> 4380

agctaggaga ggaagctact atggaggata agacagaggg agagaacgag agagggggga 60  
gcacgcaccc gaaggaagaa aaacggagac aagctgaacc ttgagacgtg tgctacaaga 120  
ctctcattca tcaaagatac cacaagagtt acatatgcct gtatccatag acaaggaaac 180  
tcccttgaga acctttcctg agaaaacttc cttgagaagc ctctttgaca aaacttcctt 240  
gagaagctag agcatagctg ctcacacccc tctaataact aagctcacct tcttgagaag 300  
cttccctgaa aaaattccta aagaagctac agcctaacta caccacccc tcta 354

<210> 4381  
<211> 461  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4381

aacattgacc cttgatagac cggtcctatg cggagacact cataatactc agcttagctt 60  
ctctagggag acccctgttg ttttcctttt tgtccagtaa cagcgcgagc ggagccgaga 120  
ccaactggac cacaacctcc agcaattaat acatttgctt ctacagagtt gagaaactat 180  
atcactgacc agattcaccg tgaccagctc tcgtnattct tctgaagac tcacgtgatg 240  
acantgctgc tccttctaatt tcaccaacct gctgcctata ggatgggttg gacctttgtg 300  
gatggatgga cgactgagga agatgtgggc atcttgacat gaatgtgaca ctcttgaggg 360  
acatgggctt cttttgttgc gcctattggc tactattgat ataatcatgg ctttacaaca 420  
acatcttctt tttggttatt ttgcgcatgg gtagcttaga t 461

<210> 4382  
 <211> 373  
 <212> DNA  
 <213> Glycine max

<400> 4382

agcttaatatct ttccctatatct caatagacca tcttcttgat caaaaacttga agacacaaca 60  
 cgaacaaaaac aaacaaaatg gttgatctgg aatgattaca tccaccccaa aacaaatgcg 120  
 aaaatgattt gaacagaagc tcatatacca atttattggg tttaagactg taaaatatga 180  
 aaaagatagg aaaacaaatg atataaggaa aagagagata acacaacaat gaaagtttat 240  
 tgcataataat agaaaatggg acaatgaaag aggtgttcat aagctctctc taactaacta 300  
 attcctttta tagaagtgtg cacacaaaac agaataactg aaaaacagtt ataacaacta 360  
 aagcagttat aac 373

<210> 4383  
 <211> 145  
 <212> DNA  
 <213> Glycine max

<400> 4383

tcatgtattc ctagattaca agacattttt ttggagattt atccatgttc atcatatgcc 60  
 aaggatcgtg gattggttga ttactactaa gctcatagac tgcattcatt agatgtaagg 120  
 acttgctaca taatgtgatg tttgt 145

<210> 4384  
 <211> 384  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4384

agcttgtaaa ttntttacac ctctgtctgt ttgtattaat tattattggt aaccttccag 60  
 aatatatatt cgtatatcat cattcatttt ggtgtctttc ctctgtgggc atggggatat 120  
 tgtcctaatt tcttttagaa tgcatttaga ttcataattt tacttgagga aagtaattta 180  
 ttagataatt taaatttctt taatctaaaa ttgattgttt gaatgttttt ttataaagaa 240  
 tttaaatttt tataatttta aacaattaaa aatatagaat tttaatttcc ttctaaaaag 300

cgagaaattg atattctctt cttgataaaa gagccttaca aaatatttgc gtattttctt 360  
tataacctcc cgtctctctt ccac 384

<210> 4385  
<211> 420  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4385

tgaacataga agaatctggt tcgcattaca actcaatggt tcaacatatg aagacagtgc 60  
tatgtaaaaa tatacataca ctgatctaaa catgcaaata aatttaaata gcatatttag 120  
atcaaacaac ggaaattaaa agaattacga gcatatctct ggccattgca aattgaacgg 180  
gaagcggcgc acacactaac ctgaaagaca gttntgttct tccataccct tactcactct 240  
gaatagatga tgtatttttt ctgaatagag aagtgggttt ggtgatacaa aacttagagc 300  
accccatcct atttatagag tctgtccatc acagagctct cagcttggtta tcagacagct 360  
tgtcatcaga acgtgagata ngaagttatg aaacgtgaca taaaagtga tcagtacatg 420

<210> 4386  
<211> 276  
<212> DNA  
<213> Glycine max

<400> 4386  
tttaggccat accaagattt ccacattaac ttctctctgt tgcatactcg tgattaaggt 60  
aattggagct tgacaaagat ccgaaaggag aaaagggtcac gaattcattc ctgctatca 120  
aaaataacaa ttgtcattga ccgattaaaa aaaatactgt ggtgctaaat aacctcttga 180  
acaaacgatg catcaacaat ttctgttata cagactaatt gattaattac tcactttagt 240  
aaacagtata tgagaagcat gacattaaga tagtga 276

<210> 4387  
<211> 338  
<212> DNA  
<213> Glycine max  
<400> 4387

agcttggaat atggcagggc aatcttgcta aaatcctgga tgaatctctt ctaaaaactt 60  
gcatgtccga gaaaagaacg tacttcctgc atagaagcga cgtaaggaag agaagtaata 120  
acatcgatct tggccttata aacctcaata cttttactaa agaccaaatg ccctaagact 180  
atacctttat ggaccataaa atgacatttt tcaaagttaa aaacaaggcc aatctcaatg 240  
cattgggtcaa aaaatctaga gaggctactc aagcaacca cttgagattt ttcactccct 300  
ttgtaaaaat cgtttacaac ttctgaacca cacaggga 338

<210> 4388  
<211> 300  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4388

tctataccac cccatttctc ttcccccttg gcaacttcta aaatccaaag tacgtggtaa 60  
taacaacaca atagcattca tataattcaa tataacacac aaacactaaa accaaaaata 120  
atccaaacat tcataaggta aataaataat ccaaacattc ataagtcaaa ccacatagaa 180  
tctaatacata aaagactaaa gtccaaatac caaaagataa cttaaagtgc gaaaatgata 240  
gcctanagat catagccaaa tacacggctt ataagaaaag agaactataa actaaacact 300

<210> 4389  
<211> 423  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4389

agctnttagg cagtaaaata gtataaaatc taatgaaaga aaaaataagt tggaggaaaa 60  
taatcataag ctacaaatgt tcaatttcat aaaaaataac ttttttctta gaaagaaaag 120  
cattttgtaa atttaattta ggattccaaa tatccaactt aattgtttcg gaaaaaactt 180  
aaaaaaaac agttaaaatt ttagattatg agttctccca aacattttta tcacataacc 240  
ttatatttcc tagattaata cttaaccttt ctactatttt tgtccctttt ttttctctct 300  
tcttcaatca atttaattct ctcaaatct tatctaatat tatcaagtgt cttaatttag 360  
tcatatttac tatatttttt taaataaaat gttaataaaa aaaattaatg aaacatataa 420

agc

423

<210> 4390  
 <211> 365  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4390

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 ttttttttatt aatccctggg tgtattcacc atttcattaa tatagaaatg atgagctgat 120  
 ttcataaaaa aaaagtctga gatggacttt tgtgctaaac aaagggcaac gagtaaaata 180  
 tcaaattagt ccttcatttt tagaagcact gtcaatttga tccctgagat ttaaaaaata 240  
 tcaaaatgat cctcgatttt acatttcgtt tgccacgtta gccctgtca ttaataatct 300  
 cctaagaccg ctagtaaagtg tgtgatatga cagcgtaaat gtcacctaga cacacacgtg 360  
 aaact 365

<210> 4391  
 <211> 417  
 <212> DNA  
 <213> Glycine max  
 <400> 4391

agctttcttag tcttggctga tgaagatgaa ttcgtgttta cttcatgcac tcctctaattg 60  
 acaatagcat catcacttct atcactaaat tgatgggagt ttgaagccat cttctcaatt 120  
 aaacttctgg ctttaagtagg ggtcatgtct ccaagggctc caccactggc agcatctatc 180  
 atacttctct ccatgttact gagtccttca taaaaatatt ggaggagaag ctgctcaaaa 240  
 atctggtggt gagggcaact ggcacatagt ttcttaaadc tctcccagta ttcataaag 300  
 ctatctccac tgagttgcct aatgcctgaa atatcctttc taaagggtgt ggtcctggaa 360  
 acacgataat attttctaaa aagaatactc tcttgaggcc gcccatctcg tgatgga 417

<210> 4392  
 <211> 329  
 <212> DNA  
 <213> Glycine max  
 <400> 4392



ttaccagaat ttctaggcga aattcatgtt aaatatattt gatgtgctct aactcatata 60  
 tatatatata tatatatata tatatatata tatacacaca cacacacaaa tattaattac 120  
 aaagacatct agaaaatfff gttttctctt tcacaatatt aacaaagtag tgaatagaat 180  
 aatataactc aagaaaaaga gtagaaaaca ccctcaaatt tgacaagaga gttacaaagc 240  
 atttctttta ctggcactta atagaatfff tgtagttaca tgtaactagt gatgacattt 300  
 atcatcttcc atggattaga aatgactct 329

<210> 4393  
 <211> 410  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4393

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 atttcataga gatgaaagac tcgggaatac atatgttatg catggaaaat gtaattatga 120  
 gattgagatg cccgaagaaa catcatttcc tagttaacca cacattaggt accatgctca 180  
 atcatttagn tntggttfff ttcttttttt tttggaaata ggtttatgat cccaacatgg 240  
 taggctcatg gtacctaaca catgaaacta agaatgcatt gtgaatfff atgcttcctt 300  
 tttttgtttt tgtttttag aggaaaatgc aaggatcatg catgagtaaa catgacaata 360  
 aaaggatatgc aaaaagcatg gtagatgcag atgcatggtc atgaaatgac 410

<210> 4394  
 <211> 309  
 <212> DNA  
 <213> Glycine max  
 <400> 4394

tgaggcacct gccttttaac ctaatgtccc caaagtggtc ttaccaagg atcttgtttt 60  
 ccatacatta cgaaaattgg caccttgatt ttttgacatc taaatggaaa attaacttaa 120  
 atagtattat ttatcatttt ttgaatttaa tttcagaaac caaagttcat tctgaaaat 180  
 tcagtagcat gttatgtcaa ataacacttg ctgcatctga tccccacatc cctataaaga 240  
 ataacttcag attttcacat cccttacgat atattttgct aagtttcaca acctcacaca 300

caaaagatg

309

<210> 4395  
<211> 394  
<212> DNA  
<213> Glycine max

<400> 4395

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ggttttcttc gagccagact tccaagaaca gtgtaagggg ttctgtgggt tcgagcgagg 120  
acaatgtggg tgttgaagga gcattttccg gcagatttca ggcgggagga gaaagagaag 180  
agcgatttta gacaggagga tgacaaagag aagagggagg gaaaggtttt cgagcgcgcg 240  
gggcttgtga aatctcaagt tttaacttat aaacataaca acatcggttt tttatggata 300  
accgatgtta actgaatata aaagctgatg ttaacatcaa atagattaca tcaatttttt 360  
aaccaaaccg atgttaaadc aactccctaa catc 394

<210> 4396  
<211> 418  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4396

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atggctattg tcaagttgag ttatttgacc cttttgctgc tactacttgc aaggaaggga 120  
tgaatggatt ttttttaatt ttaatttaatt ttttcattct aaattaattt taatttaatt 180  
aaaatatgat gttatatcag atgacaagt gtcagcatac atgtcacact taatctaacg 240  
tgatatcaca agtagtttgt cgacgtatca aataaataac cacatcagca attaattgat 300  
cctttntaac gacagagacc tcatacaaaa ctttttaatt atagtgaccc atctcannaa 360  
tgaaaaatta tgaggaatca aatgtaaaat tcaagtatat atcangggat caaaatat 418

<210> 4397  
<211> 366  
<212> DNA  
<213> Glycine max

<400> 4397

agcttatctg ctataagtta gaagctaaat aactaaaagc ttatatcttc tagctgattt 60  
aatttacagt atttaataag actaatatth aaaaaatata aatgtcaaht gatgaaaaat 120  
tatatatthta ttattttctaa catttaaat ttatgtctaa taaatttcat cttaaaaagt 180  
aggtaaaatt ttaatctctt ttgttgggg ttcaatgct atacaatgga ttatgcataa 240  
ttttgatatt ttatcatca actctgattt agaaaccaa tattttaacc ataaatccaa 300  
ataaacaatg caataattca ttaaaataaa tagtttgaca ttaaataaat taataaaaaa 360  
gtagaa 366

<210> 4398  
<211> 440  
<212> DNA  
<213> Glycine max

<400> 4398

ctcaagcttg taggtacat ttacaaccat acattggctt tgaactctat gaggaaattc 60  
acactttaaa ctgaattaga gacatggagt tacaagattt gctaccactt tcttaacttt 120  
gcaaagattg cataagcaa agccaatct tagaaggatg tttaattcag atgaatggtt 180  
gaagtctaag gcagctaaag agccaaggg gaagcaagca acagatggtt ttcttatgcc 240  
atcattttgg aatgatgtt ttatgcttt aaaggctatg gggcctcttg taagtgtgtt 300  
gaggttggtg gataatgaaa aaaaacctac aatgggtttc atttatgaag caatggatag 360  
ggccaaagaa gcaattcaa gagctttcaa taacaatgaa gggaagtata aggatatcct 420  
ttgcatcatt gataaaagat 440

<210> 4399  
<211> 391  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4399

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accgggttga gtcttctctg tggctgtgt cgcaacctac ccttcggcgg gagggtgacg 120  
catgactcgc ggggtgatgt tccaagaaag gaatatgcgc ggagtcgcca ccaacgttta 180

tttgaggaaa acgtcagaaa aactggaaaa gacgtgatct acgaacttta agtgaaaggt 240  
 tcgggagttg tatttacgca cggggaaggt attagcaccc cacacatccg tcacaagaga 300  
 cgacaacctt tattcaaagtg tgcaaatata acttcaattt atgttatctt tcctttttac 360  
 gtacttatgt nctttttatg cctttttata t 391

<210> 4400  
 <211> 372  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4400

taactccttc actgtctttt aaggtttgta gtacgaccat gttgcaggat ggatgcatga 60  
 aaaccagggt gctatgctta atgaagaaac cgatcaagat cagccgaatt ggggtgcaagc 120  
 atgtccccta gactttgaat tgagaaattg gcagatcata gagcaaccg agatttatga 180  
 tttgatgtaa ttaaaccattc ccagatccta ttgctatgcc taaggcttta ggattcacat 240  
 gttgttgagc gtacttttct tttcaattct agtgatcgtt aataaaatgc atttcaaaga 300  
 catatttctt tctgcatctc ttaacatatt tattttcggt gcaattaaat gagttgctgc 360  
 atatctaata at 372

<210> 4401  
 <211> 383  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4401

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 attctcatga acctcanggt aaaattttga gcccatgggc caaggctggg tccactcttc 120  
 tttgtaaata ttagaatagg ttttctttct tttaggggtt gtattttgat gcaatnctac 180  
 cccttaagct tattggatag aagactccaa gaggatcggg ctagagcagc taaagaaggc 240  
 tctaggcttc tcatgtacct cagggtagat ttctgagccc atgggccaag gctgggtcca 300  
 ctcttctttg taaatattag aatagtgttt ccttctttta ggcttgtat tttgaccatt 360  
 ctagtagtat aggaattttac cct 383

<210> 4402  
 <211> 278  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4402  
  
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 ccgattcacg cgcataatat attgagacgc tctcgtgaaa ttcaaattgg cataactttt 120  
 cactcagagg tccgattcat gcgcataata tatcgagatg cacataattg aacaacggaa 180  
 gctctcgaga aattcatatg gtcatacctt ttaactcgga gctctgattt aggcgcataa 240  
 tacattgaga cgctcgaaat tgaacaatgg aagctctc 278

<210> 4403  
 <211> 385  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4403  
  
 agcttcatgg gaaaccagtg gttgaagggc aaggttggat ggtgaagttg atgtgcggga 60  
 gtcataatca tgaattgcga agtcattagt tggacatcca tatgctgagt gattgactaa 120  
 ggatgaaaag ataattattg ctgatctgac aaagtcaatg gtcaaaccaa gaaacattct 180  
 gctaacgttg aaggagcaca atgtcaatag ttgtacaaca atcaaacaaa tatacaatgc 240  
 aagaagtgca tatcattctt ccattagagg aagtgatact gaaatgcaac atctaataa 300  
 gcttcttaaa cgggatcaat atatttggtg gcatagatta aacgatgaag atgtggtacg 360  
 tgatatcttt tggatcacc ctgat 385

<210> 4404  
 <211> 350  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4404  
  
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 gctttaatcg attaccatgt gatataattg attacttctc ccttaaaaag tgtatcaaaa 120  
 gttatcaaga acacattgat caattacatt gaggatctag tcgattacat tgttcttaaa 180

agttttctag ttctcggaag aacactntaa ttgattgaaa tgataatata atcgattaac 240  
 tgatggaagc ttgcttgtgg tgcttctatg gaggctggat ctttgagctt caatgaggtc 300  
 ctttaatggt gatttctcca ccatggagat gtagcggaag acaaaggaga 350

<210> 4405  
 <211> 336  
 <212> DNA  
 <213> Glycine max

<400> 4405

agctgttga gtagaaacat ttgaccaatt cattttatct cagaaaaaga aatcatatct 60  
 agtcaaggct tgagagacca tacaaatttc ctaacgattt ctaattatgt gggccattaa 120  
 gactatcata tgctgacaat acccgacaag cccatgaatc tctttcgggg cggagtaggt 180  
 gtctgccatc gccttggcct ttgcttacia tcggcggaagt tcttgactcc cgttcaaggct 240  
 aaaagcaaac cgatccatcc acatgggtgc ctattgggtg agagagatga tacccttcc 300  
 tttagcttct atctccgata tacttgggca tactca 336

<210> 4406  
 <211> 401  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4406

tttcgattca ttctatgcac ccatgtgtgg tccacattgc gtttcgtgca tttttactct 60  
 cgttctgtgt actttttata cccctcttg acgtgcttaa gccgntttac ttaagtcatt 120  
 tctcgcttaa cttataaata aaataaattt ccaccgaacg tttgaattat attatccgtt 180  
 aacttcggtt aaaatcattt ccgaccgttc ggacgtgccg taaccacgtt ggaaatcaaa 240  
 aagagggtcaa aaataatata ataataaaaa aatatctttt ttagtgaaat aaagcggaaa 300  
 atcaatcgga cgttttctct ttgggatttc tcattcttaa tcgaattgat taataactaa 360  
 ggtgaaacta aggctaacat caactcgcct agtcgagctc g 401

<210> 4407  
 <211> 374  
 <212> DNA

<213> Glycine max

<400> 4407

agctttggct attcaactat cataatTTTT gactcgaatg tatgatcgat gccgattata 60  
tatcccgaca ctcaaaatgg aacaacagaa gctcttgaga aattcaaag gccaaaactt 120  
ttctctcgga tgtctgattc acgtgcattt tatatcgaga ccctcgaaat tgaacaggga 180  
agttttggca aatatcaatg gccatatttt ttagtcgaat atatgatcga cgcccatgaa 240  
atatcgagac gctcaaaaat gaaataagac agctcgcgag aaattgaaat ggttataact 300  
gtttacctgg atgtgagatt tacgcgcata atatattgaa gttttgaaat tgaaaacgaa 360  
aagtgttggc taat 374

<210> 4408

<211> 402

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4408

tcacaacaca gcaacacatt atctaggngt ccaatacact cttaatctaa gggagtntct 60  
aggtttgaga agtgaaaccg agaatgaggt aaatttgaag caaactctca cctcacacaa 120  
gtccataaca tgaatttaaa cttgtttcaaa ctggatttac acctaaaatt tcaccgaatc 180  
aaaatttgac ttttcaacac ccaaatttac cctagaaatg gctctttgtt cactttggtc 240  
atttgTTTT ctctctagca cageccaaac tttctcacat gttctaaatg gcatttcatg 300  
ctaggattaa ctacttttaa cctccattta ccacagaatc cagattgacc ttccaactct 360  
catagcctca cttctttttc actcataaca ccacattctc ac 402

<210> 4409

<211> 362

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4409

agctattcac ttttcatcga tggacaaatt atgtcctgat atcaaaaaat aaatttccac 60  
atcctcattg cataattgaa tgaggaaact tgtgagaaaa acaagaatac tgagggctca 120

gccatgagca cataaaaaatt gagaacgaaa acctattgag gtagtcctac aaccaaacct 180  
 ctgcagaaaa tacatagttt tgtaaagatc cagtactgaa gcaaataaac atgttgagaa 240  
 aaatgttgtc aataaagaaa gatataagtc atgtggtaat cttggtcctg cgcctattga 300  
 acccctacaa aacgagcata atccaccac ctgccaagga aaaatacaga anatgaccac 360  
 tg 362

<210> 4410  
 <211> 406  
 <212> DNA  
 <213> Glycine max

<400> 4410

tagatgtagc ttttgggaga ataagagcat gccaacattc ttagatgtaa tacttgggga 60  
 aaaaagagaa taccagtcca attcctatgc caaatacaag tctccaagc accaatacag 120  
 gaaaattagg agctaagtct gttacaagag ctccaacaag ataaactact gcagctccaa 180  
 tcagcttctt tcttctacct aaatataaaa tttgtcacag cagtttcacc aggggaaggaa 240  
 atagcgaaga ttataactga caaaaaggga aattacctaa gaagtcagca acattgaagg 300  
 ccaacaagga gccaatgaag gcaccatata atgatccact agtctgcaaa agaagcaaat 360  
 gccattgccc cagtttatat tcaagatcaa tatatggagt aattac 406

<210> 4411  
 <211> 466  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4411

cgcgcnacnn cncncncnnt ttganncntt gcattgtncg tagtatagan gacgtaagct 60  
 tctagaanac tagtgggttc tgaattatat gaagccagta tataaacatc ttatccttgt 120  
 ataccagttt cactagtgtt agccttgatg tacccttcgt gacagggtag acgtggggac 180  
 acacaccaac gggtcacctc tctccttttt tctccttcaa attcgtggcc ccccccttc 240  
 tttcttccct ctttttttcc tccttgaagc atcctctcca agttcttctc caggggtcatc 300  
 ttggggggga gctccttctt cctggcctat tcctaatgg aagggccttc tctacccct 360  
 ttctttgttt tcgtgcgtct catggggaac aacccttcaa ggcccccttg agcctcaaga 420



ccgccctcta aaagccccac gcaggetcat aagtacatgc gggccg

466

<210> 4412  
<211> 209  
<212> DNA  
<213> Glycine max

<400> 4412

ctttccattg atgacaattt tgcattgttt atgtatgtct tgggggtttc cttttatcaa 60

tgtaacgctt cccacttgcg gtagtataaa taggtcatca tgtggattag tgtggaatct 120

ttgacgatgc aggaagcaag accttgccga tgtataggta ggaccatggc ggtcttcgaa 180

aaagtagatg acaaaaaatc atcttaggc 209

<210> 4413  
<211> 404  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 4413

tctcaaggaa gttntctcaa gaaagcttct caaggaagct acctagtcta taaatagaag 60

catgtgtaac acttggtgaa ctttgatgaa tgagagtctt gtgagacaca actcaaagtt 120

caacttctct ctttttttct tcttcaatt tegtgtccc cctccctctt tctctccctc 180

tttcttttcc tccattgaag catcctctcc aagcttctta tccaagggtc atcttggtgg 240

tgaagctcct tcttccatgg cttattcctt aatggatggc gcctcctctc acctccttcc 300

ctttgtcttc cgctgcatct ccattggtgga aaatcaccat taaaggacct cattgaagct 360

caaagatccc agcctcatag aagccccaca agcaangctt catc 404

<210> 4414  
<211> 116  
<212> DNA  
<213> Glycine max

<400> 4414

tagatactaa gcttccgttc ccgagagcat ctcttattta agcatttcag cttttgcttt 60

cttgtagctt aggaaaaatg ccatttcttc ttctttcttt cttccaaacc catttc 116

<210> 4415  
 <211> 206  
 <212> DNA  
 <213> Glycine max

<400> 4415

tctgattgcc tttgaagttt gaaacctctc cagacatatc tcattatcac tcttcgaggc 60  
 agaattttcc acgttgccct ttgtgctgag aataaaatat tcgcatccaa atggatgtac 120  
 attggctggg tgggtttcac cccttcata attcataagg agtatttgta agggtaggtc 180  
 ttatgtaaac tctttttgaa gataac 206

<210> 4416  
 <211> 381  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4416

agcttatttt catcaaactc tatgttaata acttcttcaa ctaccaaggt tcttgagtta 60  
 tacactctga gtgcctttga agtttgaaag tatccaagaa atatctcatt atcacttttc 120  
 gagtcaaatt ttcccaaggt gtcctttgtg ttgagaataa aatatttgca tccaaatgga 180  
 tgaaaatatg ttatgttggg ttccatccct tccataattc ataaggagta tttttaaggt 240  
 taggtcttat gtaaattctt ttttgaagat aacaagtagt attcactgct tcaaccaga 300  
 agtgtttaag ggttgaatta tcattaagca tgggcctagt catctcttgt agatatctat 360  
 taattntttc aattaccct g 381

<210> 4417  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<400> 4417

agcttctcat ccttagtaac agctactact ggacacacac aactacatat tgtgttccct 60  
 ctctgaattt cggaagtaat agtcccttga ctactcttct aatttctttc cctctaattc 120  
 taagggatgg actctacact ttttgggata tcttttactt aggctccatt gatgaattta 180  
 ttacatgca ctctttttaga tttgaatcta ctaactccac ctagagcgtt ttggctatag 240

aagttccttc taataacggg ataattatct cacttgacat taccctcact ttttggcact 300  
 tattccttgc aattttctcc ttcaaatttg aacaatttat agagtgatag ggagctagtc 360  
 gttggtgtga ccattggacg atgaattcaa cattcaaattg ttgcatgagt ta 412

<210> 4418  
 <211> 354  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4418

ngctctanat ttacattgat gtttgtatct atgggaggaa gttgcatgcc atttttgttt 60  
 taagagtagt gtccactgg taaaactaac ttccaaatg tttgccttcg caggaaatgg 120  
 acccgaagaa gcttgctca aagaggcca ggaaggacaa ggcagccgaa ggaactagtt 180  
 ccgctccgga gtatgacagt cacctgttta ggagcgctgt acaccagcag cgcttcgagg 240  
 ccatcaaggg atggtcggtt ctccgggagc gacgcgtncg gtcattggac gacgagtata 300  
 ctgatttcca cgaggaaata tggcgccgcg ggtgggcac actggttact ctca 354

<210> 4419  
 <211> 412  
 <212> DNA  
 <213> Glycine max  
 <400> 4419

agcttgaaga gaatggaaga gggaggatat taaaacttga gatagcaaca tggaaagaaa 60  
 tgaagggtgtt tatgaggaag acattcttac caccttcttg tgagaaagat gcttatgaaa 120  
 ggcttcaaaa cctcacacaa ggtagcaaga gtcttgaaga gtaccatcaa gaaatgataa 180  
 tgactatgag gagagctaata tacaagagcc taaaacttcc atggcaaggt tcctatgtgg 240  
 gcttaataga gacattcaat gcattgtgaa gttgaagcac tatgaaagtt tggaggatat 300  
 ggtgcagaaa gccaaagaaag tggagagaca acctgagagg aagcattcct acaagaagac 360  
 ctatcactat gacttttcta gtggtaaaaga caagtccaag aaggagggat ct 412

<210> 4420  
 <211> 421  
 <212> DNA

<213> Glycine max

<400> 4420

tatcataggt ggggtagttg agggaggcac tatgaat ttt ttcactaaaa taatttatag 60  
ggtgcccacc ttgtaacaat acagctccaa ctcccactcc agtggcatca cattctagct 120  
caaaagggtt agaaaagtca ggaagagcta gaacatgttc cttattaagc ttttctttga 180  
gaaaagcaaa ggcttgctct tgtttttcac ccaagtaa at gccacattct ttttactag 240  
ctcattgaga ggtgatgcaa ttgtagagaa attaggaacg aaccttctat agaagcttgc 300  
taacccatgg aagctcctaa tatctccac actttttggg gtgggccatt cttggatggc 360  
cttgatattc tcagggtcca cttggacccc atttctacca actaccaacc ctaagaaact 420  
a 421

<210> 4421

<211> 388

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4421

atatatagat tggctgcttc aggcgctttc cagaatttct tttgggagcac tcaaacacgt 60  
acatggccaa ccatcacaac taggggaggt ggatcaatgc gagaactatg ccttttgtgg 120  
tgaaaattct atttgcatgt atccaaatat tggccttctg ttttgtttgc ttgtttaagc 180  
tttttgaag agtcggcttc atatatagcg atttccggta attatacatt ttgtatataa 240  
aatgtgtctc tacatgggtt tgattatgat tcttaataa cagccaatat tactttatat 300  
atatatatat atatatatat atatatatat atatatatat atatatatat 360  
atatatatat ataagagaag ccatgccn 388

<210> 4422

<211> 361

<212> DNA

<213> Glycine max

<400> 4422

tgccgcgaca cctaaattcg atgtacggca aatcctcatg cgggatcagt tggaacatgg 60  
atgccagagt ggcaagggca tcggccatct aattctccac tctggggatg tggtgaaagg 120

atacatcatc aaagtactct atcagttttc taatgtaggc ctggtagggt atcaacttat 180  
gatccctggt ctccctattct actttcaatt ggtggattac caaggctaag tccccatata 240  
ccttgagcaa cttgaccttg aagtcaattt ccgcttggat cccaagggca tacgcctcat 300  
attcagccat gttgttcgtg cagtcaaagc ccaacctagt cgtgaagggt atacattgat 360  
c 361

<210> 4423  
<211> 403  
<212> DNA  
<213> Glycine max

<400> 4423

agcttgacac aatttatctt tctcaaactt gagtttctga agaccaatta ctaagtcttt 60  
cgtaactaga tgagttagat tatgcatatt agtatgtgca gtcctacaat gccacaacca 120  
tgaatcatct attttactca ccaagcaact aagctcatga aaagatgcat gctcaatatt 180  
cagcatatag atgttaccta ttctcttacc aagggtggaca actttaccgg atatggcttc 240  
acttatcaga caacaatttt tgttgaattc aatcttgaca cctttatcac aaagttgact 300  
aatgcttata agactatgct gtagtccatc cacatataac acattcttta tctgattttt 360  
gaggtgatcc cctatatttc cttctcccat tatattacct ttg 403

<210> 4424  
<211> 357  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4424

tgcatatgga attgcgaaag cccccctcca tcatgaggat ntgttctctgc catctcaaac 60  
aaacatatca aacgtatcaa gacaaatata gttggtgttt gaatacctcg ccactcaag 120  
tgtatcacac aattatggct tttctctaata gaaacactct tgccttttac cactctaatt 180  
ccccctgagt tcttaggcaa ttcaagagat tatggccaca acaaagaaca attcaccaat 240  
atgtgtaagg taacgctaga gagacaagga aaagggttaac caagacaaag gctaacaatg 300  
ttattaggca caaatgaagg aaataaaatt ctgaatctat gaattcaagt aacaatc 357

<210> 4425  
 <211> 409  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4425

agctntataa ttagtagtga ccatacccta atatagaggt cagtgaatc tcacaagtgc 60  
 atatctttgt tctcatgtga aacacactgt ttggctctag ctagcttttc ccttgccatt 120  
 ttctacctag cctttcagag atcacatgta gtgttcctt catttcattt ggaagcaatt 180  
 tgaaagatat cactctttga aaatgagggt cctctgtttt ttactttttt gctaacaatt 240  
 agcatacata cacgagctac aagcttagtc aactcaacta agattacgct atgcaaaagc 300  
 tgcaatgtgt ctaatgtcta tgctcgagcc aaagcttctt attagaaact tttgtgaggt 360  
 ttatagatac aatacaattt acaaacgttt ggatagaata agttactta 409

<210> 4426  
 <211> 377  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4426

tcaatttgct tggatagcaa cttgttatgt gccacaatg catcatatga tgaaagttcc 60  
 agcacgcttc ttttggttgg gatgtccttc agcagtcttg gactctgtga agtatttctt 120  
 caagaatctt tcaaccactt catcccaagt cttagacta ttaccttta atgaatggag 180  
 ccattcttgt gcctctccag acatggaaaa tgaaaacaag ctcaatctaa cagcatcttc 240  
 atgcacgcca gccagtctga cagtgttgca aatttcaata taagtggcta gatgtgcata 300  
 cagggtcttc tttggcagac catgaaacan attgttctta atcaactaaa ttaatgaatg 360  
 tggataggtt atatttt 377

<210> 4427  
 <211> 408  
 <212> DNA  
 <213> Glycine max

<400> 4427

agcttggaga ggatgcttca atggaggaaa agaaagaggg agagaaagag agatggggga 60  
gcacgaaatt gaaggaagaa aaagggagag aagttgaact ttgagttgtg tgtcacaaga 120  
ctctcattca tcaaagttac aataagtgtt acacatgctt ctatttatag actaggtagc 180  
ttccttgaga agctttcttg agaaaacttc cttgagaagc ttctttgaga aaacttcctt 240  
gagaagctag agcttagcta cacacaccct tctcataact aagctcacct ccttgagaag 300  
cttccttaag aagattccta aagaagcttg agcttagcta cacatacctc tctaatagct 360  
aagctcacct tcttgagatg agaagctaga gcttagctac acaccccc 408

<210> 4428  
<211> 415  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4428

tgaatgtagt tccatccctc cttggagggtg actgcaaatt gagttgagaa tgagcgagaa 60  
aggttatcaa cgttagtga ataaacatta tcaaagttgt atgagtagga gttgtgggtt 120  
tattggacaa ccaactggcgt gaagaaccac acacactctg gacattgatg ctctattatc 180  
cacatctcta gtatagttag taagactccc aagaattgag ttctggatat ttcttgatct 240  
ttcanatacg ttctctccac accttcccaa tgtgttccac aaccacaagt tctaataatta 300  
tgattaagaa taattggtaa atgagaatat tatcattatt aaacgattaa attgagtgat 360  
aataatataa aaagtgaacg ttgctattca tagttctaaa ttcacttttt ctta 415

<210> 4429  
<211> 404  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4429

agcttggtga tctcttcctg atgatcaaca caatattgca tttgctgctt caattttggg 60  
ctgcagattt cataagcaat gcatttagta tgtttacttg gtaggtttta attttcaata 120  
aaagtaatta atttttttag aatttaattt tttatgcaag gtcaatgtga gttcttgta 180  
cacaaatgta attcatttta ttacatatt acccaattca ttaatatgat gcagtgaatt 240

tgtattaaaa aaatatactt ttaattatat ataatataga agtttttagca tttagcaact 300  
 cactctttta cacattttta tataagaaat tntattatac gttaaaattt attanaaaat 360  
 ataaaagaaa aaagactcac aaaaattatg aattttaatt aatt 404

<210> 4430  
 <211> 412  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4430

tatgctgcaa acatttataa tagaccctct cagtagctta accaacaaca atataataat 60  
 tatgatcttt caagcaacag atataatcca ggttgaaga atcatccaaa tctgagatgg 120  
 gcaagtcttc cacaacaaca acagcctgtc cctcctttcc agaatgctgc tgggttcaagc 180  
 aggccatatg ttctctctcc aatgcagcag caacaacaac aacaaagaca acaagcagct 240  
 gagggccctt ctcaaccttc cttagaggag ttagtgaggc aaatgatcat ccagaatatg 300  
 caattntagt aagagacaag agcctccatt cagactctga canattagat agggcagatg 360  
 gctacttagt tgaaccaagc tcagtcccaa aattctaaca aattgtcttc ac 412

<210> 4431  
 <211> 387  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4431

agcttgctga atattccaat gtagaatatc ggttgataa aaaaaatgta gaaaacaatg 60  
 gagaggaagt attgaagtaa cactaactaa taaatatttc ttgagcacca ttgcagatac 120  
 tcccaagtcc caccatagat gttggtcaat cttgttgctt tctaactagt ctcaaataac 180  
 atcactcaat caaataatca aatgaaaaat caactcatat ctcatgcata ttaatttttc 240  
 acttcaccgt atacaattat aaaatccttt tttttcataa gctataaatc aaatacttat 300  
 atatcaattg aaaatatctc ataaggtaaa atctaatacca acctttacca taagcttttg 360  
 ttaagcaagc cagacacana catatac 387

<210> 4432



<211> 389  
 <212> DNA  
 <213> Glycine max

<400> 4432

ttagaacaag ctaaacaatgc atactattaa ctgaaacata aatatatacc cacattataa 60  
 aatgtgcfaa aagcacgaaa tgataataaa agtgttcaaa agacaggaaa atagaatata 120  
 aatcctgtca tgagtcctag tgatgcttta aatgggtcat catatggagc ataaggggca 180  
 aaatccatgg ctgcaacatc atcttcattc tcagagagct ccatcaccgg tgtcgtcatt 240  
 ggggatgcct atagaataga gagctccagc acacgtgtgg tcaactggtga tgctgtgga 300  
 gtcgtctctg gagttgcctc cgcagagtcc tcatgagtag ctaggacagt ctctgggtca 360  
 gcctctggca tgtctagctc ttcgatatc 389

<210> 4433  
 <211> 347  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4433

agctttgaaa tttatataaa gcctgaagtt gttcatgtta taaaagtaa atcgagaaga 60  
 acaagagaat attttgaggt aaaacaaaca agtattgtaa tgctatcagt tcactagggt 120  
 aataaacaag aattgttttc agttttcacc aaatgattgt caatgcatta aatttaattt 180  
 tttgagtga tcttttttct gctagttaca gctctctagc tacttatcac aatttcacaa 240  
 tattcttttt tgtatttaac ctcacattta ttataatcta ttactattta aagtatatgt 300  
 ttttgaaggg tgggtggatnt acatttgcaa gttcaatatc catctac 347

<210> 4434  
 <211> 174  
 <212> DNA  
 <213> Glycine max

<400> 4434

tctagccaaa tgagcgtacc ctgaattaat tcttttgata gccctttga gcctatgttc 60  
 ccctttcttt gttttgaagc tcattacaag ccttaagtga aaaaccatga taccctaccc 120  
 ttaaggaatt ttggagcttt ggaattgttt tgggaataag tgtgaggggg gggg 174

<210> 4435  
 <211> 378  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4435

agctntacag catattntag taatgacctc ctaacctaga attaaaataa cttaatgccca 60  
 ttaatctagg gaattgaaaa aaacttaatg gctgagtgtg actgaaatag tggcaaccaa 120  
 aagtcacccc caacagccaa cttcagccac catttggtct ccanaaggc tgatgcctag 180  
 gatgcccaatt gggcccttat tacaacttga actaaaccta ctaaagccct tttagggtgat 240  
 taacccaaaa catatTTTTg gtcagccaac tctacaagga ttgggccatt atttatacaa 300  
 actaaacact ctaaaattga gacaaagtgg tgccatttaa ttcttctcca ttttggccat 360  
 gatacaactc acaacctt 378

<210> 4436  
 <211> 404  
 <212> DNA  
 <213> Glycine max

<400> 4436

tataatatat tgatatgtc gaaactaaac atcggaagct ctcgagaaat tcaaattggc 60  
 ataacttttc acacggatgt ccgattcggg tgcataatat gtcgagatgc gtcaaagttg 120  
 aacaacggaa gctctcgtga aattcaaattg gtcataactt ttcacactga tgtttgattc 180  
 aggtttataa tataacgata cgctcgtaat taaacatcgg aagctctcga gaaattcaat 240  
 tggtcacac ttttcacacg gatgtccgat tcgggtgcaa aatatgtcga cacgctcgaa 300  
 attgaacaac ggaagctctc gagaaattca tatggtcata acttttcact cggatgtccg 360  
 attcaggcgt atcacatata cagacgctca caatttgaca acgg 404

<210> 4437  
 <211> 335  
 <212> DNA  
 <213> Glycine max

<400> 4437

agctttataa gtgcgggtct gggagactaa ggtcaagtgt tgcgaatatg cgaagatgat 60  
 gttccaagta ctttggattt ggtacgacca tgctctcttg atttccagct gggaaattgg 120  
 cgagtggagg aacgccccgg catttacgca acaagcataa tgtaaaccctt tacgggtttta 180  
 aaaagctcta tagttgggcc taggctttta agttttcatt ttgttaaggc tttgtgtctt 240  
 ttgtttttga atctataata caaggatctt tcttcactctg ttcttggtct ctacccattc 300  
 tcattcattt gcatggttac ttctttttct aaaac 335

<210> 4438  
 <211> 398  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4438

tggtcacctc cttntcacc acatctagaa tgatgggggtt gagtcgttgc tgtggctgcc 60  
 tctactggctt agctccatcc tctaaaagta tcttatgcat gcaggtagat gggctaattgc 120  
 caagaatgtt ttctaaagtc catccaatgg atttcttgtg cttcttgagc actagcagca 180  
 acttctctc ttgctcagta gcaagggagg canagatgat cactgtanat tnttccttgt 240  
 cctcacagta agcatacttg aggtttactg ggaaggactt caactctggt gtgggtggtg 300  
 gctgaacagt gngaggaacc acngtaggag aagaagaaaa acgttctcgg cttgtacctc 360  
 ataaagcaag taagaagata tgtaccttct gcaacatg 398

<210> 4439  
 <211> 397  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4439

agcttggcac agtcatgcct tcttgatttc caattaggaa attggcgagt ggttgaacga 60  
 cccaaggttt tcatggcggg cataatgtaa ttcttttagct ttaaccctac aactgggcct 120  
 aggctttaga gtttttctcc ctgttaaggc gttatgtttt tgctatcgag atatataata 180  
 taagatcttt ccttcactctg ttcttgcacc ttcaccatt ctcattcattc tgcattgtta 240  
 tttctgttgc gattaatatg tatagatccg acgatgagtc ctgcgaaggt actaataccg 300

agggccctga cggttgattnt gaacgagtag caaaccaagt tgaggatgaa gaagatgaag 360  
 atgcgnggtt tctcccgag ctagaaagga tggtcac 397

<210> 4440  
 <211> 365  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4440

tattgggcat taaagttttt gaacttcgat tcanatgcat ctagtgaaca caggaagctc 60  
 ccactccatg anatggaaga attgtgggtt ccagcttatg agaattccca gctttataag 120  
 caaagaagta aaatttatca tgacaaaaaa gttgtcaaaa aagaaaattt tcagctttgg 180  
 tcaacaagta ttggtattta attatagatt aagattgttt ccaggtaatc tgaaatccaa 240  
 gtgggttcgga ccattcatca tcaaagaagt tatgccacat ggagcagtga tattggagga 300  
 cccaactacc anaaggacat ggaccgtgaa tggaacataa taaacactag ttagatgata 360  
 tttca 365

<210> 4441  
 <211> 403  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4441

agcttatnt atacacagtt ttcattctga agtatctgtt gtctcacagt cggtggattc 60  
 ttcactctga tattcgtcta aagtcttaag tctgttattt aatgcaaaca ttaaattgtac 120  
 atctcttctt catgcaaat ccattggtgat aggatctgtt gtcttttaca tcaacaggaa 180  
 agccactttt ttcattataa catgtatgca acaacaaagc gtgcttttta atgaggatca 240  
 acgtctttca gactgtagac tttattcttc ataggacttt gacagatccc atgagaatgt 300  
 tttctacttt aaagaatatt agacatagag tattaaatga aagtcttaat gtattactta 360  
 attgttacat catatcgtct tacgagtga tcatctaana act 403

<210> 4442  
 <211> 412  
 <212> DNA

<213> Glycine max

<400> 4442

ctccgcttca tcagtggat aaagcacaag agcttcaaga ttgtctcctt aaacctccat 60  
 taatatttcg ctttaccttc tcttccattg tgtgttcttc attttttttc tccatgtatc 120  
 tcctcacatg tcttgtgcta aatgggttta acatcattct ttagagtctc caccgattaa 180  
 acttgctata gaagctagat ttgaatatct atgggtcaga attcttgctc ttgttcttga 240  
 accatgaatt gtgttgagtt taggctcctt tgagtttagc ttggtatttt ctcgggctga 300  
 aacctaatac ataaaattct tacaagaat ataaaggaga agaaaacctc acaaacttag 360  
 agcgacttgt tcacctattg gtagtttgc atagaagaca tgtctagtca tg 412

<210> 4443

<211> 408

<212> DNA

<213> Glycine max

<400> 4443

agcttcacat gtttgagtg actcgtctag tgaacatct acttgatcct aaagggtttt 60  
 ctcaattttt aaatgatctt tggatagatt cttgaaattt cattgtaggt ttttgtaagc 120  
 ttttgagaga atagactagt tagatagaag ctcagtataa gcatttctaa gagatttagg 180  
 gtccgaaatt tacctcatct tcttagtctg attcaaactc ctcagagggt gtatttgtca 240  
 tcaggcatat gtgggcttct tcgttgtctt cattagatga ggtgttgctc aggtcttctt 300  
 tcccactgct cataagaacc ttcttttctt tagtcttgaa gaatttcttc ttatcttgac 360  
 ttttctccag atctagacat tcaaacttag actttttata ctcgtagc 408

<210> 4444

<211> 427

<212> DNA

<213> Glycine max

<400> 4444

actcagctta agccaggcca gactcgtgca tgcagaggct tctatggaaa aatgccaaac 60  
 tctacaaaaa aatctgattt caagcttaaa taagtgggct ggtccgtgct tgcgcgctta 120  
 gcgcaaactt taattgctta tcgcacatat gtggattttg gcttagcgcg cttctctcgc 180

ttagtggata agctgaagcg gtgcgcttga tgacctggag cgatgcactc agcgaacctg 240  
acagcttatac ttcttctggc ttcttcctcg cgcttagcca ctgagtgccg cgcttagcga 300  
atgctcctaa gccaacagat tggcttatcg agaaggtgaa aacaacactt tttccaattt 360  
gcctaattaa cctgagattg agagaaattg attattaaac acacaaaaca aaaatataaa 420  
ttatcta 427

<210> 4445  
<211> 412  
<212> DNA  
<213> Glycine max

<400> 4445

agcttataat aagaaagtga agtcaaattc ttttaatggt ggagatttag tttggaaggt 60  
tatcctgccc atagatagta aggatcgagc cttgtgcaaa tgggtcccaa attgggaagg 120  
accgtttaaa ataattcaga tctattcgaa tgggtgcttat gagtttagagg agctaacccc 180  
tcagaaacgt actttgagca taaatggtaa gtatttgaaa aaatataaac caacactgct 240  
cgaagttaat ataagcatag aataagagaa atacgggaaa cataaaaatg gcgataacag 300  
taaattgccg cgaaagggca tgtgtcaata ttacatcgag aagtagaatc gaaatacaga 360  
attcgaaata aagaaatcat aagttctact aagtcatgac caaatcttca ta 412

<210> 4446  
<211> 380  
<212> DNA  
<213> Glycine max

<400> 4446

tgtaagaatt gcaagatcat cttccttgac aactccttga taattattgc catcaatagc 60  
cagagatgac aatttagaga gtgatccaat acttttcaaat ggatttccac tgaatttatt 120  
aatagacaga ttgagatata ttaatgatga aagttttcca aatgatattg gaagagcacc 180  
accaattaag ttgttggaag aatctagcat gtcaatattt ttaaaagccc caatttgatc 240  
tatcagattg cctgaaagtt gtgaactccg aactgcaagt gttgtgattc cctatgaaat 300  
acaaggagca agaatttcta aaagttcatt aacctgttgg ttgagtttga gatatgataa 360  
acctatcttc cttaagttgc 380

<210> 4447  
 <211> 389  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4447

agctngctcc actatatttg gattggatca taaagtttgc acccctgaat caataacatt 60  
 ntgttcactc attgatggct tggccagaca tggcaagggtg aatgatgcct atatgcttta 120  
 tgaaaaaatg ttagattatg gtcagactcc aaatgcagtg ttgtatacat cccttattag 180  
 gtactttttc tcgtgtggta ggaaggaaga tgctcacaaa atttataaag agatgatgta 240  
 taagggtctg tctcctattc cttgctcctt aataattaca tggattgtct tttcaaagct 300  
 ggtgaaattg agaaagggtat ggctctattt caagagataa agcctcaagg tctaacttct 360  
 gatgtaagac gtattcaatt tttattcat 389

<210> 4448  
 <211> 436  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4448

actcaagctt gtcctaagct ccctttcata gtaagagga atgtgcctct tcctaagggc 60  
 actcttaaga tcattccaat actctactgg aggatcccta tggatccttc gttcgagctt 120  
 gtccataagc tccttttcat agtaggaggg aatgtgcctc ttcctaaggg cactcttaag 180  
 atcattccaa tactctattg gagaatcccc atgaatcctt tgttccctaa aaaggggaagt 240  
 ccaccaatag agggcatacc cttganagct aatggtagcc aatggaactt ttctctcttc 300  
 gctaatatga tggcaagcaa agagttgttc aaccttcatt tcccaatcta agtaggcctc 360  
 aacattatct tttccatgga aatataggag gctaattgta tcctcttgaa gccttattnt 420  
 cttttctctt atttgg 436

<210> 4449  
 <211> 375  
 <212> DNA  
 <213> Glycine max

<400> 4449

agctctgagc caaaatcctg tctcaccata taccttgacc caaggtgaga atgccaatcc 60  
ttaccctctg gagcgaaaaa aagatgagaa ggaaatattt tctatcaaag gaaaaaggag 120  
aatgaaattt tccaatccta gaggaagcat aacaggagag aatgattatt tccaatcgaa 180  
ggaaaaatga gaagaaagga aattcccaat cacagagtgg gataaagcga aaagaaaaga 240  
cagaatattc tccatcatag aatgggagaa cgattttaga gatgtccata acatgattgt 300  
tcttgatcat tgaaactaga aaaaatgtgc ctaaagatct ttgaccaga tgatatctga 360  
acaatacata attgt 375

<210> 4450

<211> 338

<212> DNA

<213> Glycine max

<400> 4450

tttaattgaa tccgcaccgc ccaattgtgt ctgtaaatgg tgtaatcgat taccagatat 60  
tggtaatcaa ttaccagtgt atctgaacgt tgaaattcaa attcaattgt gaagagtcac 120  
atcttttcat aacatgcttt gtgtaacgga ctacatgggt tcggtgatcg attaccagtg 180  
acaagttttg aataaaaagt caagagatgt aactattcca acgcgtttta ggttttctca 240  
tggttataac tcttccaatg gctttcttga ccagacatga agagtttata ataacaagac 300  
cttgattatc atttaataac tatttataac tttttgac 338

<210> 4451

<211> 409

<212> DNA

<213> Glycine max

<400> 4451

agcttaaaga taaattaaga ataatgattg aatatcttat cttatattct gataatatat 60  
tctatcaaat acaaactgat tagttaggct aaaaatactg atataatatc ttatcatata 120  
ttctataact cgtaaattac ccacaaaaa ttatttactt cgaaatcttc tagctgaaat 180  
ttcttggaca aatttccaaa ttcaattgta agcattatta tcacagtttc agataaaaca 240  
aaaataacat tacctctcta ctcttataat ccatacaaaa attatcatat taaggctatg 300



caacttcttc tgaattcttt ttaaccactt gatcaagcat aattaaaata tccaatatcc 360  
aatgtcaatg gataaaaaca tgtagaatgg gagtataatt ctacatggt 409

<210> 4452  
<211> 404  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4452

tctaatttta ttataccact agnattatat tatcataaaa taagtacctt ttggggaaca 60  
catgtcaaga ttaatagaga aataaaatgg taaacattta aattaaagga gagattacca 120  
aactctgtat tctaattgact aagacatgag acaagatggg gcaaatagtg gaagcatttc 180  
catgactaag acatccatta tgataggagc cactgttaca tcccatgaca ctataataag 240  
gtggagatat tacttttagta tgatacaaaa atattggtat aattcccaat taaatagatc 300  
aagtaaaaac tatggagtat agacgatgga tccttgctta gacttatcta agaggggaata 360  
aaagagacta tactacgagt acataactcac aagatctggt aaat 404

<210> 4453  
<211> 305  
<212> DNA  
<213> Glycine max

<400> 4453

agctattgta ttcaattttg atgcgtcttt aactattaaa tgactcaatc ggatatccga 60  
gtcaaaagct attgtcgttt gaatttgctc agagcttctg cttgaaattc gagtgccttg 120  
atttattacg ggactctatc gatcatccga gttaaaagtt attgtctttt gaatttgctt 180  
agagttactg ttttcaattt cgggcatctc gatatactac aggactcact tccacttttc 240  
agtaaaaagt tattgccatt tgaattttgt gagagcttct atattcaatt tcgagcgctc 300  
tgaat 305

<210> 4454  
<211> 333  
<212> DNA  
<213> Glycine max

<400> 4454

tgtccaaaat gcagacaata ataattttta actcggatat tcaattgagt attgtaatat 60  
 atcgagacgc tcgtaatgga aaacagaagc tcgtataaaa tgcaaatacg aataactttt 120  
 aactcggatg atcgagtggg tcccgtaata tatcgagaca cttgaaattg aaagcagaag 180  
 ctctgagcaa attcgaacga caataacttt tgactcggat atccgattga gtcatttaat 240  
 aattcgagac gctcacaact gaatacacia gctctaagct tattcaaagc acaataactt 300  
 ttgactctga tgtccgattg aggcaattata taa 333

<210> 4455  
 <211> 396  
 <212> DNA  
 <213> Glycine max  
 <400> 4455

agcttgtgca tccaatacct tgatgaggat gtcccatatg ttcttaagac tggactgatt 60  
 catttgcttc caaagtttca tggccttgca ggtgacgacc cgcacaaaca tttgaaagaa 120  
 tgtcacattg tctgctccac catgaaaccc ccagatgtcc aagaggatca catatttctg 180  
 aaggcttttc ctcattcatt agaggggagt gcaaatgact ggctgtatta ccttgctcca 240  
 aggttcatca cgagctggga tgaccttaag aaagtattct tagaaaaatt tttccctgct 300  
 tccaggacca catccattag gaaggatatc taaggatata gacaactcaa tggagagagc 360  
 cttgttgagt actgggagag attaagaaac tatgtg 396

<210> 4456  
 <211> 365  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4456

tgtatactga actgagtatt gggcactcat tgcattgtctg atatgccttt tagaggcttg 60  
 aaaagtgcga gaaaacaagc tatgttttct gcatttcttg gaaaacgcga tgaaatcgct 120  
 aagcgagcat gctgcactaa gcgagttcat caatactcat tgtatataag ttttatctga 180  
 agaactcgct tatcacactt actgtgctaa gcgagttcat cttnttgagg atgaacactc 240  
 atcctcttgc tgaactacct gtggctaagc gaggtgaat cgctgagccc ggggtgactta 300

accaaatttc atggtgtag ccttgcacta agccgaggtt ataggagcta agcgcatthc 360  
atcac 365

<210> 4457  
<211> 288  
<212> DNA  
<213> Glycine max

<400> 4457

ctttgaattc ccatgttaat agctcgagga aatcagtgat gtgcacaggt aagctattac 60  
atcttctggt catcgattac cagagagtta atttgttgaa aaagactttt taacttatct 120  
ttcttggccc aaccttgtga tacgttcctt ggaattccct tcctatttaa tataccctct 180  
ctaagactct agagactagg ttgatcatcc atcttgaata tcattaattt ctttgcctg 240  
aataaagctt cgaacacatc gtaaactttg gcatcagtga aacattca 288

<210> 4458  
<211> 240  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4458

agcttntcgg tatattatgc acctgaatca gacctccggg tgacaagtta tgaccatttg 60  
aatttctcga gagcttccgt tgttcaattt cgagcgtctc gatattctat gcgcttgaat 120  
cggacctccg agcgaaaagt taagaccatt tgaattgctc aatagcttcc actattcaat 180  
ttctagcgtc tcgatattat atacgcctga atcggacctc cgagtgaaaa gttgtgacca 240

<210> 4459  
<211> 388  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4459

tggaaggatg cttcaatggt ggaaaagaaa gagggagata atgagagagg ggggagcacg 60  
aaattgaagg aataaaaagag ggggagaagt agaacttttg agtgtggctc tatagacttt 120  
cattcactaa agttacaaca agtggtacac atgcttctat ttatagacta ggtagcttcc 180

ttgagaaact ttcttgagaa aacttccttg agaagcttct ttgagaagac ttccttgaga 240  
 agctagagct tagctacaca caccctctc ataactaagc tcacctcctt gagaagcttc 300  
 cttaagaaaa ttcctaaaga agctagagct tagncacaca cacatctcta atagctaagc 360  
 tcacctnctt gagatgagaa gctagagc 388

<210> 4460  
 <211> 149  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4460

agcttgagat taagaantgt tgaacggtga gacttcctgc tatcattgtt gaccacagag 60  
 tgttacctga agatatgacg cgcggtgcaa gacaccttga ggacgttagg aggggagcta 120  
 ttgccccaaa ccaattttga ccaatcccg 149

<210> 4461  
 <211> 366  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4461

tccanagatt ggaatcgctt ggtatcatatc tgagctgttg gtctagaagc agagctcttc 60  
 ctcttcctgg atgccatcta caataaaaaa aaaaagaacc attggtttat tacactagaa 120  
 gtctatctaa attaaaactg aaattaaaga ctgaaattga gaacgtgctc ttagcgagac 180  
 gcatctcact tagcgcgctt tatgaaaaac aacacaccaa cttaacgtaa caggccgtgc 240  
 ttagccggtg ataacatata aaaaaattct gcataattgg cttagagaga caacactcgc 300  
 ttagccacat gtttgtcatt aatgacgtgt acagcagctg tgcgcacacg gtggtcgctc 360  
 acccac 366

<210> 4462  
 <211> 397  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4462



<210> 4465  
 <211> 280  
 <212> DNA  
 <213> Glycine max

<400> 4465

tcggaagaaa gtgatgaggt acaagcccta aaggcagatc ttgaaagagc ccgggtagtc 60  
 gaagagaaac tcaagtccat agccatcaaa gtctgaaaag agtatgatga actaaggagac 120  
 gtcaatatgg ccacagctga agcctttgaa cgaaaaacca agaatgcccc gaaagaaaaa 180  
 cagaccaat acaagttttg aggggcttta tagggcaaca atagttagct caagctccga 240  
 agaggtgaaa ggaatcatca cgggtcaaag gaatgatctt 280

<210> 4466  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4466

agctntatgg ccatataaac actaaggctt atgggttttt tttccccgtt caaatcaaac 60  
 caatgcttct aacaatgctc tttttatcaa tttacgaaca cattcgagtc catttaggaa 120  
 tttgggaaaa aatttcattg cattcaccct ttaggggcac acacattttt tttttcaaaa 180  
 atccatttat gttctgacc gtgaattttc caaagaaaac tggcgggtcat cttcttttaa 240  
 aagcgtgtta gtttttttct tttggctttt tctttcaatc aatctctttt aagcaaaaat 300  
 gattagaaaa ggtttgcaac ccgggcacag ttggcatctg agattacgct ttatcggaag 360  
 gagtaaaagg cgtgcggata aaatacacag acccctattt tggcatttaa 410

<210> 4467  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4467

ngaagtgaga aagtgtggaa gagtcagtct tctactttt attcgttgac cacagagtgg 60  
 tacctggaga tatgtcgcgg ggggtcaagag accttgggga cgtcaagtgg ggtggatttg 120

cccaaaacca agcttgacca atcccgaccc aaccoaagca tagtcagtca gtgagaacct 180  
 gtgacgtacc taaacaggcg agctcctggc agtcaaccga taaaagaaca aagaccacaa 240  
 agcaaggagg cttgtgtggt ggctggccag ctatggatct tgagtgatat ttgggttatg 300  
 gcctctggta atcgattaca aagggtgtgt aatcgattac aaggcttaag aatgggtgtca 360  
 ggaagttag atggcctctg gtaatcgatt accaaggggt gtaatcgatt ac 412

<210> 4468  
 <211> 302  
 <212> DNA  
 <213> Glycine max

<400> 4468

agcttctcga tatattatgc gcttgaatct gactttctgt ttcagaagtt atgaccatat 60  
 gaatttctcc actgtattcc gtgtgacaag atatgaccat ttgaatttct cgatagcatt 120  
 cgttgttcaa tttcgagcgt ctcgatatat tatgcgcctg aatcggactt ccgtgtgaca 180  
 agctatgacc atttgaattt ggcgagagca tgcggtgata gatttcgagc ggctcgatat 240  
 attatgcgcc tgaatcagac attcgtgtga caagttatgc gcatttgaat ttctcgagag 300  
 ca 302

<210> 4469  
 <211> 257  
 <212> DNA  
 <213> Glycine max

<400> 4469

tctcgatata ttatgcgcct gattcagagt ttcgtgtgaa aagttatgac tcttgggaatt 60  
 tctcgagagc ttccgatgtt ctatttcgag cgtctcgata tattatgcac ctgaatcgga 120  
 cttccttgtg acatgttatg accatttttag gtactccga gattctggtg ttcaatttca 180  
 cacttctcga tatattatgc ggctgaatca gacttccgtc tgaagagtta tgaccatttg 240  
 aatttatcgg gagcttt 257

<210> 4470  
 <211> 199  
 <212> DNA  
 <213> Glycine max

<400> 4470

agcttgagat gaggaagtgt tgaaggggtga aacttctctgc ttttattcgc tgaccacaga 60  
gtggtacctg gagatatgtc gcgggggtca agaaaccttg gggacgtcag gtgggggtgct 120  
attgccccaa accaagcttg accaatcccc acccaacccg ggcataatcg ctcaatgaga 180  
acctgtgatg tacctaaac 199

<210> 4471

<211> 427

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4471

tgctgtccg atgcagcagt aatgatggcc tgagttatgt tggggaacgg ttacgaactc 60  
ggaatggggt taggcaaaga caaaggcggc ataactagcc tgataaatgc caaaggaaat 120  
cgtgggaagt atgggttagg ctataagccc actaaggcag atgtaaagag aagcatcgcg 180  
ggaaggaaga gcggtagtca aagctcgcg ttgagacaag aaggtgaagg aagcccgccc 240  
tgccacataa gtagaagctt tataagcgcg ggtctggggg acgaaggcca agtggtcgca 300  
atatacaaag atgatgttcc gagtacattg gatttggtag gaccatgcnc tcttgatttc 360  
cagctgggaa aatggcgagt ggaggaacgc tccgacattt acgcaacgag cataatgtan 420  
accttta 427

<210> 4472

<211> 402

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4472

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gcgactggtc cctttcttcc cttcgcaact tgagttcact attgctaccc catagagctc 120  
cgcgaaattt gttccggcca tactcttctc tgcgagccct cttgggtctct tgatcaaggg 180  
ctcttgcggt aattgcattc tcttcccgta acccggcaca ctccttccga acgtgtgtag 240  
cagccaactt gaacttctcc ttggcgagtt ttgcctttcc taacttgctt ttgagagctt 300



ggacttcttc gtctctctcc ggtgcttcan aattctcttc gctgacgaac ttttaacttgg 360  
cgagccaatc tatacctcgt atgcgaactt tcagccattc gt 402

<210> 4473  
<211> 347  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4473

tgtgcaaadc aaatcactcc tacatttcat ctctagcatg cattntttct ttaccctacc 60  
ctcacgtttg gttttttaag gaaaaacacc ataactaaac gcgccacaag gcattcctat 120  
cgcaccagat ccaaactctaa aatgatgggt gatcaagagg agacacagga acagatgaaa 180  
gccgacatgt cggctctgaa agaacaaatg gcctccatga tggaggccat gtttaagtatg 240  
aagcagctca tagagaagaa cgcgaccacc gctgccgctg tcagttcggc tgccgaagca 300  
gacccgactc tcttggcaac tgcgcaccat nctccctcaa acatagt 347

<210> 4474  
<211> 404  
<212> DNA  
<213> Glycine max  
  
<400> 4474

agctatataa ttggataata tgtctcacca aaaagtacta agagacatca tattccccaa 60  
tacaaataaa tataacagaa ataaaccata ataataaagc ctcacaaaaa gaaatactat 120  
gagaaacat cattgtaaat aaagatttaa gccatttctt tttgttcttg ctccaccatca 180  
ttgaaaaaca caacttctaa ctctggttca tcaagagata actgagcaac ctcaagagtt 240  
ccattgtcat caagtggacc aaattcatct tctgcaatgt cccacatttt agttttccct 300  
tgattgtatt gtggggaatt tctataaagg aggtgaagat tactatgaac acaacttcta 360  
actctgtgtc atcaagagat aactgagcaa ccttaagaat tcca 404

<210> 4475  
<211> 405  
<212> DNA  
<213> Glycine max

[illegible]

<400>	4476
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<210>	4477
<211>	351
<212>	DNA
<213>	Glycine max

taaatggggtt tagtntttct cagaattggg gataaacttt ggacaccaag ttgtgcaacc 60  
aaactccaca tgacagttca cttttgcaac acctaatgtc actgcactac tactctgttt 120  
cactttacta ctcttttggt ttactactac tctattctat tgctaacact tattctatat 180  
aacaacatta acaagaccaa tgcaatatgc aatacgcgga gataccttac ggttatccgc 240

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acccttttgt catccagagg cggcgggccc gatgacaagc agagaccaag tttggtcatt 300
ctgcacccaa gatacgcgga gataccttac ggttatctgc acccctttgc t 351

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<210>	4478
<211>	404
<212>	DNA
<213>	Glycine max

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agcttgtaac aaatcttcta gacttggagt gatcacatgt agtcctcttg aacccttacc	120
accactcag gaaggccaac aggtttagcc ttctcaatgt attttgaaca aaattcaatg	180
gcttcttctg caatgtacct ttcaacaata gatgcttctg gatgatatag attctttgta	240
taccctttta agatcttcat gtatcgctca accgggtaca tccaccgcaa ataaacagga	300
ccacaacatt tgatttctct taccagatgc acaatcaagt gaattgtgat gtcaaaaaaa	360
gcagggggga aaatacatct ccaactggca cagtataatt ggga	404

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<223>      unsure at all n locations
<400>      4479
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<210>	4480
<211>	374
<212>	DNA
<213>	Glycine max

<400> 4480

agcttgaagg tgtgtaaccc accattgtcc atagtagaat actggtaatg tgtctactat 60  
cattgtcatc atttttcgtc attgaggtgc cacttgagct gccaaagttct ccatttttgg 120  
gcgtattctt tgaagatcc atgccccctt tttttgcaca tgaattgtag ttgcatccta 180  
tctgaagcca ttataccaac actgcctaac gaaggcaacc attatgtcct cccaggaatg 240  
gactegggaa ggttccaagt tagtgtacca ggtaacaact accccagtaa gactttcttg 300  
gaaggaatgt atcaaacaat tctcatcttt tatgtatgcc cccatcttcc gacaatacat 360  
ctttgatgg ttct 374

<210> 4481

<211> 407

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4481

tcttagtctc agctgatgaa gatgaattcg tggctacttc atgcactcct ctaatgaaaa 60  
taacatcatt tctggcacta aattgctggg agtttgaagc catcttctta attaaatttc 120  
tggcttcagc aggggtcatg tctccaatgg ctccaccact ggcagcatca atcatacata 180  
gttttttaaa atctctccta gtattcatat aggtcttttc cactgagttg cctaatacat 240  
gaaatatect ttctgatggc cgtggctctg gaagcagga aatttttttt ctaagaatac 300  
tctcttgagg tcaccccagc tcgtgatgaa ccgcgaggca tggtaataaa gccagtcctt 360  
tgccactccc tctaaagaat gangaaaggc ctccagaaat atgtgat 407

<210> 4482

<211> 400

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4482

agcttgaggg ttctcttaac tcaatttatg caagtctcca tctcaaatca caaaagcacc 60  
gaatcgacaa ttaaaaaatct tgaagtgcaa gtaggccaac ttgcaaaaga acttaggaga 120  
agtctaattg gaatttatgg ctaccatgga gcctaaccct taggagcatt gtaaagcagt 180

gctcataagg agcatgcatg aagagggcct agctcatgat gttgttaagg gtgtagttga 240  
 ggatgatagt aatgatgagg aagagaaaaa tatagagaga gagagagaga gagagagaga 300  
 gctgtgtgtg gaaaatgcag acnaaatgat gaaaataata acaattgtct taaggagggt 360  
 gggatttcat gaggtcttaa ttcaaaaacc aagagtcatg 400

<210> 4483  
 <211> 369  
 <212> DNA  
 <213> Glycine max

<400> 4483

gttttagttt cagatgatgc ttatggggtt gtagctacct catgcactcc tctaattgact 60  
 atggcatgat ttctggcgct aaactgctag gagttggagg ccatcttctc aattaaattt 120  
 ctagcttcag caggagtcac gtctccaagg gctccaccac tggcagcatc tatcatactt 180  
 ctctccatat tactgagtc ttcataaaaa tattggagaa gaagctgttc tgatatctga 240  
 tgggtgggagc aactggcaca tagtttctta tatctctcct agtactcata caggctctct 300  
 ccactgagtt gtctaatacc tgagatatcc tttctgatgg ctgtggctct cgaagcaggg 360  
 aaaaaattt 369

<210> 4484  
 <211> 136  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4484

agcttgtcag ctatgtggag cccactccta gtggctatta gatgactcta taaggcattt 60  
 gcgaaggcta tgaagcacia gccgaagcat tccanattgg taattcctcg cgctcgatcc 120  
 cttacngaga aaccta 136

<210> 4485  
 <211> 243  
 <212> DNA  
 <213> Glycine max

<400> 4485

tataagatac tcaagcttag cgaatcagcc tcgcttagcc acaagtatct caatagtgag 60  
gatgagtgtt cattctccca ggatgaactt gcttagcgcg gtaggcacac ttaatgagtt 120  
cttttgaaaa cgcataatatt caatgaattt tttatgaact cgcttagcgc agaatgccgg 180  
ttagcgagtt catcgcgctt tccaaaaaaa aacacgatct acacactccc ctttcttcca 240  
ttt 243

<210> 4486  
<211> 114  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4486

agctttgagc aaattcaaac gacaataaat tcttactcgg atgtctgatt gagncccgta 60  
atatatcgag acgctcgaaa tggactactg aagatctgag caaattcaac cgac 114

<210> 4487  
<211> 152  
<212> DNA  
<213> Glycine max

<400> 4487

agcttataag aacaacattg ccttaattat ttccaaatat gcatgtgaat taggacgcat 60  
caacaagaat caagccaagg ctattgtgca accaatcaat ggggcaaaac acaccaaattg 120  
attataatga tggatggctc aaaatctcac aa 152

<210> 4488  
<211> 84  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4488

tgaagggtga tagcccactc atcttttcat agtagaanat cgттаатgtg gctactataa 60  
ttatcattgt ttctccgcca ttga 84

<210> 4489  
<211> 81  
<212> DNA

<213> Glycine max

<400> 4489

agctttaaaa tttgaattaa aacattcatc atattactgg taatcgatta ccatatatgc 60

gtattcgact acacagcgca c 81

<210> 4490

<211> 303

<212> DNA

<213> Glycine max

<400> 4490

tgttaaagct ttatatggat taaaacaagc tccaagagtt tggataaaaa tgacgcgctc 60

attcgtcttg aatgctaaca ctctcttaac tgttgcgaa agtgcacctt cccaaagcga 120

atcttagaac gatggttaat tcttaagaat cagcgaaatc taaggcagct aaaaaacccc 180

aggggaaagc agcaacaaat ggtggtctta tgccatcatt ttggaatgat gttgcttatg 240

ctttaaaggc tatggggccc cttggaagtg cgttgaggtt ggtggataat gaaaaaaaaac 300

cca 303

<210> 4491

<211> 320

<212> DNA

<213> Glycine max

<400> 4491

ggggtgaacc tagctcatgc ttttatacaa acggtcatca agtcaagtct caatatggaa 60

ggaaccgtct tagcaaattg gggccaaaga tgaatcgagt cacatcactg cttcgtctac 120

tggcaagcat atttaggatt attgatgtcc ttgttacatc caatttcacc ttgacaaaaa 180

tgcatggac catgttgaaa atctaaattg attccacccc atatcctgcg taaaaattcc 240

cacatacttt cactgtgcat cattcgcata catccatgct ttcattgggt tgcattgctc 300

attgcattct ctcttgaaa 320

<210> 4492

<211> 304

<212> DNA

<213> Glycine max

<400> 4492

catggtagat atgtaaaatt ctaaaactaa acttttttagt tggatctata caattcacct 60  
agcagttgta aaaagtccag ggggctgaaa aaggatgatt atataatgca caatattgaa 120  
aatattgttg tatgattgtg ctaatcctaa ttgtattgag aatattgcta catgattgcg 180  
ctgatcttaa ttgattctat ttgcattaat tctgattgta tgtattaatt cttattgtat 240  
tttaatttta ttttgtatct tgatctcttg attattggga tcacttattt ttaggataga 300  
tagt 304

<210> 4493

<211> 363

<212> DNA

<213> Glycine max

<400> 4493

tccatcaagt tgaatccttg tttgttcgga ttcccatat aattcacttc ctatgcagca 60  
tcatcaagggt gtatacaaca actagattca tatgctcttc cacatatact acaacctcca 120  
acctgtatta ctactgaatg ggaagggtga actacttgca gttgggttggt cagcttacta 180  
agtgtctctg tcaatgattc cagttgttta gctaacaact tgttcagtgc caacagtgc 240  
tcttgtgaag aaatctctag taggcttctc tttgtgggta catgagttct atcacacaga 300  
atagcatgat cactattagc catattctca ataagttcca tttcttcttc aggagtcttt 360  
aat 363

<210> 4494

<211> 452

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4494

ntgaaccccn tgaannnctt tgatccctga tagagccggg atgcttacag tccacctgca 60  
ggtaccactc tggatatttc gaccgtcaac gagatttatt tgtgagtatg acacaccatg 120  
tgagcgcgga agatgacgcc tatctccggt tgtcaacggg cttgtcggcc acggttgacc 180  
aaaggcgcac aacacgacct tagtcttttg cggctgtctt gcttttcgtc tacagacagc 240  
acaaaagacc gtctatacgg attaccactt gggctctttc cgacgtcagc gggactcaaa 300



tgtgaggctg acagaccttg cgaacgcgga agacgactaa atatgcgcgc tgcaccggct 360  
 tgcggacggg gtgaaaaggg ccctaaaaac gcgataatc cttgcgcgat ttggctttcc 420  
 gcttccaaca gcaaatacag gggctctcgg cc 452

<210> 4495  
 <211> 356  
 <212> DNA  
 <213> Glycine max

<400> 4495

ggagctgcct cggtaaaaat gcttcccagc gctctttaac cggtggatct tctcgaaatt 60  
 aggtttacaa cgtcaaaaga cacttgcca tgatctgacc gttgcgatct gtgagaagat 120  
 gtctggagtg tgctagaagc ttccgttctt gagagcatct cttatttaag catttcagcc 180  
 tttgctttcg tgtagcttag gaaaaatgtc atttcttctt ctttctttct tccaaagcca 240  
 tttctaaagt tccaagaact ttctccatca cccacatgca ccattagcca ccacaaacta 300  
 tcattgttct ccattgtaaa cccacaccga gaggaaccct tcaaccgaag cggaat 356

<210> 4496  
 <211> 332  
 <212> DNA  
 <213> Glycine max

<400> 4496

agcttggggg agccttgatg ctctcatagg gaggcttagg gctgcttatg aggaaaatgg 60  
 tgggtcccca gagactaacc cttttgcaag tggctccatc aaggtgtatc tcaaaaaggt 120  
 tagggagtgc caagccaagg caagaggtat cccttacaag aagaaaaaga aggcctcaaa 180  
 tcaaagcaag ggaaatgatg aatcatcctc caccatgcac ttctcttgaa caacatcttc 240  
 agtatcgatc cctttggacc tttcaagtca tggtaattaa ttaattaact aatcttgctt 300  
 gccatcacac tcatgatcat aaactatgct ta 332

<210> 4497  
 <211> 379  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations

<400> 4497

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agagaaattg taggcaagtt gcatcagaca cagcaaggta gtgatggaga tatatattga 120  
aaagagagaa atgcgagaga aaaaaattgt accaactttc aaacatgctg ctccgatcca 180  
tacgtgcttt ttacttttta aagtttttgg gagctacttt ggaagaaacc tttgagataa 240  
aagatgagat gggtcaccga gaagttgaca cttatcacta aatatatgga ttaactcacc 300  
taanattatt ttaacttgag tttgaatctt aaacatataa ttatattaaa tatttaataa 360  
aaaaatttat catttataa 379

<210> 4498

<211> 342

<212> DNA

<213> Glycine max

<400> 4498

agcttgtagg attatggggg acccatcaca tgtggtacta ggtgggtggc gggcgatggg 60  
gcacaacaag ttttccacat tcacaaagcg cgcataaacc caccatcccc tgttgcccac 120  
cttcaactga gctcacgtac tcccacgtag cccatatact cgtttctctc aacaccgggt 180  
cccatcaat cctcccaagc ttccccaaca tcaaagtaat acaacattca aacaacacaa 240  
gctatcacag ccaagcaaaa cagggcaaag gcagaaaact ctgccccaaa caccaaccaa 300  
aatcacagct tttcacatac aaatacccca gaaacatttc ct 342

<210> 4499

<211> 280

<212> DNA

<213> Glycine max

<400> 4499

tatactaacc ggaacatact ttaccattag aactgccaat acctactggg gttcgctatt 60  
ggaaggaatt gatttagctc aatttttctc tattcatatg caccataact ccataagcat 120  
tctctttctt ttcagtccta ttcattatct tttacacatt tgtgagtagg tgggtggatt 180  
ttgctcgatg ggggtggagtc caaaagataa aagattgaac attatctttt gccatacttg 240  
aaaccttaaa ctaattctcc attggtatta gaatttgaca 280

<210> 4500  
 <211> 270  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4500

agcttatcat cctttnttag tgactcatga tagccttaag tttacttcaa tagttgttct 60  
 ttacagaaat tttcatttct gaatacactt aagctaactc atgagtaggc ataaacttaa 120  
 aaggctcatg attcctgctc aaaatgtgtt tcataaataa aacacctcta attttggact 180  
 catcagttct ttaattttga cacactcata atgatgctca gaaagggtta tagagcaact 240  
 accagaattg agaacttgga ataattcttg 270

<210> 4501  
 <211> 308  
 <212> DNA  
 <213> Glycine max

<400> 4501

tatcggatta tggggcacc cgcatttctg gtactatgtg gcgatcgggc gatggcacia 60  
 atcaactatc ccatttccac aagtcaagca taagcacacc atccccaatt gccaccttt 120  
 aaatttagct cagctgcacg ttgtagcctt ctctcatte ctctcaggcc cgggtcccca 180  
 tcaaccctc caagctttca caatatctag acaattcaat tccatttgc atgaaactac 240  
 cttaaacaaa gaaaaataaa gtggaggcag aatctttgca caagaatcat tcaaattcca 300  
 cagagttt 308

<210> 4502  
 <211> 354  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4502

tagagcttag ctacacacac ccctcaaata actaagttca cctccttgag aagcttcctt 60  
 gaaaagattc ctaaagaagc tagagcttag ctacacacac ctctctaata gctaagctca 120  
 tctccttgag atgagaagct ggaacttagc tacacacccc ctataatagc taagctcacc 180

cccatgacaa aatacatgaa aatacaaaga anagtccta ctacaaagac tactcaaaat 240  
 gcctcgaaat acaaggctaa aacctatac tactggaatg gccaaaatac aaggcctaaa 300  
 cgaaggagaa atacctattc taatatttac aaagaatagc gggctcatac ttag 354

<210> 4503  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4503

gtaaccccc ttntaaatga taggcttaga atgcagatta agacgaagaa gaagaagaag 60  
 aagaagaaga agacgaagaa gcaatcaatt taacaatgtt cttttaaatg cgtaagatca 120  
 aattgattgc gataaaataa atgagataag ggaagagaga aatgcaaact caattttatac 180  
 tgggtcggcc acttctcgtg cctacgtcca gtctcaatc aactcacttg atattttcac 240  
 taacttcgta aaaaaacctt tttaacaactt ctgaacaccc aaggaatccc tttcccttgt 300  
 gttcangaaa ctcaaatc aagagacaac cagtctcttg attacaactt actttctgag 360  
 atgaatataa agatttctct ccttttagagt ggataatata acttgatggt ct 412

<210> 4504  
 <211> 384  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4504

agcttccctt acaacanaga gaagagaata atgaaggatt gaagaaatac aagtagtggg 60  
 gatgtctnct ccacctctag aacctcacia tcaactcacag actcatctca tgctctcagg 120  
 atggcttctt cttctcactc tgttctctac cagtcttctc acagcaaaaag ctttgaaaac 180  
 tctctggaac ttggacctt ctctctntag aagtctctaa acatgcaaaa gctttgataa 240  
 tttcccaaac tccctccaa aatctgattt caggcttaaa taggtggctt tgtttggtct 300  
 agcacgctta gtgcaactat ggaccgtca gcgtgcatta gtggatttcg gcttaacgcg 360  
 tgcgtttctc acttagtgga tgga 384

<210> 4505

<211> 360  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4505

tgaatntggt ttagacatga ttgatacatg atttgtgact tgtatgaatt gatttgngca 60  
 agaatggatg agaggaaggt gtgatttcga aatctgcact tatgcagaaa ttttgctgtg 120  
 aaattgtgca gcagaatddd gcacaagtgc agaaaaatgc ttgtgtgtgg ttggctgtgg 180  
 aaagtctagt gcagaatgag ttcttgatgt tngctagtag atcccaacgg tcataatgta 240  
 ggcttatgta ctagagactt ccagtaaaaa tttggagtcg atccaacggg taacgaattg 300  
 gatcgaagga atngttactg gggctctttaa gtgagaaaag ctgtgatntt ggttgatgtg 360

<210> 4506  
 <211> 336  
 <212> DNA  
 <213> Glycine max

<400> 4506

agcttgtgcg aatctttccc ttttgttcta atgatctcca tggttaagat agaattcatt 60  
 aatcaaggca aggttggttg gttttgtctt tatcggttac ccaaattgtc gtcgagcgag 120  
 aagcgggttg tagctaattc cgccacgcat acccaaaaaga ggtacgttgg gatattcacc 180  
 acaactcaca ataatctctc caacatcact agctgcttgg taccaaaca tgtcagatgg 240  
 gtcaagagtc atgattcggc gagggccaaga aagcttatca tcattggtct tgaaggcacg 300  
 ggattgaggt aagtggaagg taaaccactg atagag 336

<210> 4507  
 <211> 371  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4507

taataaaaaa agcattttcca aatattccaa atcatcatta gctatatttg atgtgcctaa 60  
 catcagtgac gtagtcgata aatttgcttc tattacgact tagttaataa tagggaagat 120  
 agaaataaga agcaatcaca ctctctatgg cttctattan gagtgaaaga aagagcattt 180



<212> DNA  
 <213> Glycine max

<400> 4510

agcttatcat ccttttttag tgaccatta tagtcttaag tttacttcaa ttgttggtct 60  
 ttacagaaat tttcatttgt gcatgacta aaacaaactc atcaattagc atggtgctaa 120  
 tgggctcatg actcctgctc agaatgcctt tcataattaa aacacctata attcagcact 180  
 caacagttct ttaattctga cacactcata atgatgctta caaggcttag agagcaccta 240  
 ccaatattga gaacttgga taatttttga agcccattaa tatgat 286

<210> 4511  
 <211> 261  
 <212> DNA  
 <213> Glycine max

<400> 4511

ctcagcttgt ggtagaatgg tagcatagtc agtcaaatta taagtttggg ttgaagttca 60  
 taccataagg cctgtcaaag ggaagctctt agttgacctc attgtcgaat tccctcctag 120  
 tgaaagcaac aacgaagggt ggggattttt tacgtagatg aagcttcaaa caacaaaagt 180  
 agtgatgttg gagttacttt ggaaagaaca aatgacatct caacaaaaca gtcatttgaa 240  
 gggttgattgg aaagattcaa a 261

<210> 4512  
 <211> 335  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4512

cacctgcggc atgctgcttg gcaaggcata agcatatgat cctaagtggg taaaggcgca 60  
 cgatctatgt gccgaanagg gtttaaaact acagggtggg ttaggctatt ttaattatat 120  
 gctatcttgc tattttgaat tttcttcgaa ttggtatttt tgttttgata tttgaaatag 180  
 ctcatctttg aagagtata tgtacaaacc ccaatttgct gggtttgtag atgtggattt 240  
 ggccgcagat aagaacattt ttcttaagag tttggatatg gaaaattcaa ttcatttggt 300  
 gcttatatat agccattatg agctcgaana tacta 335

<210> 4513  
 <211> 400  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4513

tgtgagcaag ctntcttggc cttcatgaag actattgcca tgccgccagt cctaagtcga 60  
 ctcaagccag gagtaccttc acttctatac ctctcagtgg ctgacaaaagt tgtaagctta 120  
 aaccttgtac aggaggacgg gaaacaccag ctccccatct attttaccag tcgtatcctt 180  
 catgatgctg aaaagtggta ccagatgata gagaaggtag tgctggcact cataacctca 240  
 gatcgacgcc tcaggttgta cttccaaagt caccaagtgg tagtcaagac aaactaccct 300  
 gtcaaacagg tgttgtgaaa gcctgaactg gaggaatga tggattatg gtcctaagtc 360  
 gacccaagct aggagtacct ttacttttat acctctcaat 400

<210> 4514  
 <211> 239  
 <212> DNA  
 <213> Glycine max

<400> 4514

agcttatggg atccatgggg ctttccaaac cactaacttc ttatgcaaga aatagttaat 60  
 ccattgggag ttacatcccg aaggatatga tcaaatagct aattgggtca ttctatctca 120  
 gtaccaactc tattttgtta aatgggtttt tttttatgga taatcgattc tgggtgaattg 180  
 ggaagagtta cttcatgtat aatgccttct atttcacaaa ctcattaaat aaaacatat 239

<210> 4515  
 <211> 375  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4515

ttttaccctg tttctgactt caattgtgaa atttctgaat gtatattttt cttgttttgc 60  
 atccataaca ttgctgagct ccagtaatta gtatttgga tattgctgag tctaattctt 120  
 agggaggtag catccttatg tagagaaaaa taccttcttt ccaagttgag agaggataac 180



aaggaatnnt tctctctttt ttatggttca acttcaagcc atgtcattca ggatgttgat 240  
 ttcttatttt tcttttctt tttctttttt ctttctttt atctataaag tagatgctct 300  
 catttcacac agtncaacaa tttcttgtaa tntgttagtg gtgtagagaa taaattgcaa 360  
 gtgcatgatg aatga 375

<210> 4516  
 <211> 273  
 <212> DNA  
 <213> Glycine max

<400> 4516

catgccagct tgtaccgatc ccatatggtt ggattattct caaagacttg tcttctatg 60  
 attttaccta atgagagtga cctaacttac caacgtgtga tctgctttat catgtactca 120  
 tgggcacttg acgaagtttt tctaatacat ggtaccacat tgcatataag attgagtctt 180  
 agtatatttg gtgcataacg cttgtgtatt gatcgatatt gattggttga gtgatgttgt 240  
 gttttgatcc ttgagtacgt gaatgatggg aaa 273

<210> 4517  
 <211> 412  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4517

tgcaaccact gtgactcata ttcagtaaag gaactctgtt ggtatgtttt tactntcaga 60  
 atcttcactg acagagcaaa acttaactac tgaagttgta gtcctaatt cccatgagag 120  
 ttatagtaag actaatagtt ctgactcctt actcctaatt cctgaactct tccaatcttg 180  
 agctttttat ggtgtaaaat tgtttaatgc tgtgctttgt gttaaatata tctagaactt 240  
 tagatgattc ttagagtcaa taagagattg atctatgtta tatggaggag tgaagtatct 300  
 attataaaat atgtaacatg aacaaaacta caaagttacc ctgtgcatgc catggacaac 360  
 ggggccatga ccccccatag ccacatcagt cctttgagtt gcagaaatat ta 412

<210> 4518  
 <211> 319  
 <212> DNA  
 <213> Glycine max

<400> 4518

agcttaatgt tttgtgatgg tggttagctt gtaaggggtc acttgatga gctcatgagc 60  
catatgagtc atgtatgtaa agatcatttt acacgaggta gtaatctaatt cttggaatca 120  
ccgttagttc acatttgtga tctaaagctt tcaaccattg aattaatttc acacaacaaa 180  
ttcaacaaac ttgatcgaat aacacatcca tcatcttttc caatcatacg agacctttga 240  
agaagaagaa ttttcaaaaa tcaaactctg attttgaatg caaacatgaa acgattatca 300  
ccgaatggct ttgaacaca 319

<210> 4519

<211> 327

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4519

caagcttttaa actttgctaa ctaaataaat tgaaatataa aacttaaact aaaacattaa 60  
ctgaacataa aatgtatcaa aagcagaaaa ataaatggta atcctgtcat ggctcttcct 120  
gtgctgctgt gggctcatcc tgaggtaagg agggagcatc ctgngctggc tgagggatat 180  
ccttagctgt aacaggccat ggatcccaaa gtgtttgcgc tactaccata tctgctacat 240  
aatctatatc tgcagcgcca tactcctcat ctgagacctc tacccttggt gtagtaactg 300  
aagaagtctg cgggggtggc tctggag 327

<210> 4520

<211> 205

<212> DNA

<213> Glycine max

<400> 4520

agcttttcag catatatcta gctcgaaata tttatctaca tgtatgacat tcaatccagt 60  
cctatatgtc caaatgctga aacctgacac tactaatata taaactgttg cgtgtcactc 120  
ttgttaggaa gaataaataa aataatgaaa cataacttct tcggaggcat gaagatgacg 180  
ataacttcat gtcacaaaaa caatt 205

<210> 4521

<211> 365  
 <212> DNA  
 <213> Glycine max

<400> 4521

tgttagaagc cgtgatgtga aattcatgga agaccaattt attgaagaca ttgagaaggt 60  
 ggaaaagtat acatctaagg aagacaatgg tgtggctgat tttgaaatag ttcaatcgcc 120  
 tattcagaat ctgaatattg atgttttagaa tgatgttggt gtccaacaac ttggagatga 180  
 ggtaaatgtt cctactgatg atgatgaaga ggagcatgac atgttacaag atgaaaatct 240  
 tggtaatgct actgaaccac cttaagttca actcaggagg tccaacaggg agagataacc 300  
 ttctaggagg tattctccta atgagtatgt gatcctaaca gatgatggag aacctgagta 360  
 cttta 365

<210> 4522  
 <211> 316  
 <212> DNA  
 <213> Glycine max

<400> 4522

gctacctgaa tgcccgcatc gagaattaat atgccaagag agatttttct gtctttgaag 60  
 aaggatgtgc ggctctcatc aatgaggacc tgtataacat gcctcagcct atttgctaatt 120  
 aacttagcga tcaccttggg catacaccca atcaaagaaa tgggggtgtg atcatcaaaa 180  
 gactgatggt gattaactgt gggaagtaaa gccaaaagag aaacattact gcctataggg 240  
 aatcttccat gcacaagaga atcatgtaca aatcttctgg agtcaattat taccactccc 300  
 cacaattact taatga 316

<210> 4523  
 <211> 196  
 <212> DNA  
 <213> Glycine max

<400> 4523

ccattcatgc tggccgaaca acaccaaccc ctccgaactg aagctagggg tttcaaacta 60  
 gcgtatgaaa caacgaactc tcctcgtgc ttttcgattc ctttcaattt ttcatgtttc 120  
 caactgaaca aaattaaggt ttaacttggt gtgtgtgatg aaaattgaga attggatgat 180

ggagagtgtg tatgga

196

<210> 4524  
<211> 458  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4524

tgaaacccctt ggaagnccct tgaatacctt agagtccacc gtggatgctc tacagtctac 60  
ctgcaagcat gcaatctgtg caactggaat gtacgaagat atccaagtaa tctgtaatg 120  
gaacattgga aagggtgcaaa gaaagatctg agatacttac agggaaacgaa agatcacatg 180  
cttacatata aaaagtcaaa tcatattcac gtgattgagt attcacactc atactttgtt 240  
ggatgtgggg atataaaaaa aaacctctt ttctatgact ttcttttaac cgaaggagcc 300  
atatcatgga agatttgcca ccaatgcggt gttgctgcat caccctggga gatgatcttg 360  
tggccgtcaa agctacatgt aatggaaatg gtgagacccc tatgcatagc cttcattggc 420  
ttcagacttt atgtgaatac cctaaacagg cgtggacc 458

<210> 4525  
<211> 286  
<212> DNA  
<213> Glycine max  
  
<400> 4525

agctcggaga ggatgcttca atggcggaaa agaaagaggg atttaaagag agaggggtga 60  
gcactaaatt gaaggaagaa aaagggagag aagttgaact ttgagttgtg tctcacaaga 120  
ctctcattca tcaaagttac aacaagtgtt acacatgctt ctatttatag actaggtagc 180  
ttccttgaga agatttcttg agacaacttc cttgagaaag ctttttgaga aaactttcgt 240  
gagaagctag agcttagcta cacacacccc tctcataact aagctc 286

<210> 4526  
<211> 399  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4526

tcagcctgat tgctaagcga catcttatcc ttggcttagc gtgacccagt gtcgccaagc 60  
gcaattcctt acagccataa ctgggggttca taaagctaag caccagtcac ggcagctaag 120  
ctgaattcct tgcagcaatg tgagcgctaa gcgaggcctg atctgtagaa gcacagacta 180  
tgagcttgat gctttcatga tgccatatga acatgcgttt cccaagttaa gatcaagaca 240  
aaaatccaag agattcaaga tacatcatca agaagatctc tagtgattta cggagggaag 300  
ttcaaaatga aacaacaaga ggtttggcca agaanattaa gctaaaatgt ccttttcaag 360  
agaattactc tctagtaatc gataccagag gatgtaatc 399

<210> 4527  
<211> 305  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4527

agcttgtaag tgttatgctn tgatctgtgc gtgtatgctt ctaacatgac ttcattgttt 60  
cttttataag cagtatgctt tgccctttgt ctttctgctg actgggggtca tttctgatca 120  
tgaaatgctt gatttgttgg acttggcttt atcaactgac acttcaaata caattgtgag 180  
agcccaggaa ctgctcagga caaggataga tccttttaca cttatatcac aattggaaaa 240  
tcttattata gacattcttg tangtcaatg tgaacttggg gatttttgaa atcaaacaag 300  
atttt 305

<210> 4528  
<211> 364  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4528

ttaatctagc ttgactagca ttcttagtca atggctattc taatcagtc tttcagctt 60  
acttactctc taaaaaaggc taacacgtat tagactttta tatcgtataa ccgaggtaaa 120  
agcatcgacg tttaaaataa tatcggtaac atcggtctct cagaaccgat gttaatatat 180  
aaatacaaca tcggttattg aaataaccga tggtatataa taagaaatat aaaaaaagta 240  
atatatcttc atatcaacat cgattgttat caaaattgat gttaatatat gcaacaaca 300

tcatnttttt tggaaaaact gatgnttgat gtctatatta atatcgggtt aaaaccgatc 360  
 ttac 364

<210> 4529  
 <211> 247  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4529

agctttttga aaacaatttt tattatcatt aagtnttnga acatatgact ttgtgacatt 60  
 gagagattga gcctaatact taaaaatagt tcanaagggtg aaatgaacga tagtantaat 120  
 ggtgtatata gatccgtttt ggtatagacc aaatatcaaa atgatattat tttcttatat 180  
 aaaattactt atatttcttt ctttaaaaaa tattgtttat tatcataaga ataaaattta 240  
 ctaactt 247

<210> 4530  
 <211> 353  
 <212> DNA  
 <213> Glycine max  
 <400> 4530

agcttaccca ttcagtttta gggtttttat gatgatgctt gtgatgttta tgtgctgaaa 60  
 ttgcttatgg aaaactgtta gagatgaagg gtagagttaa cctaggggta gaaagtgaga 120  
 atatggtggt atgagtggaa aaagagtgag gttttgagag ttggaaggcc aaatctggat 180  
 ttagtggtat ttggagggta aagtgagtta atcctagctt gaaatgtcat ttaggactta 240  
 tgagaaagtt tgggttgtgc tagagagaaa aacaaatgac caaagtgaac aaagagccat 300  
 ttctagggta aaattgggtg ttgaggagtc aaattttggt tcggtgaaat ttt 353

<210> 4531  
 <211> 359  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4531

tgaaggcgtg taaccaccca tcttctcata gtagaacatc gataacatgt ctactatcat 60



<212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4534  
  
 tcttagagat ccactttntc ttgtctgttt tgtttttgaa aactctagca catgagtgtt 60  
 cactatngaa aagttttgac ttgggaaaca ttttttcacc ttttgttcca agaacaaaaa 120  
 atcttccact tacactcttg ttccttacac ttcgctctaa ccctttcacg atcattcttc 180  
 tttcaaacan attcccttcc taggtgaatt gtgtagtctc taagcgcac cttaaacaag 240  
 tcaagggttt caaattccat ccccaactct aggtgaactt gaccaaaggt tgaatttgga 300  
 ttaaaaattg ggaaaacaac cttttcatca tctcatcat ct 342

<210> 4535  
 <211> 346  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4535  
  
 atgatagcct ggagttaact tcaatgggtg ttcttggag aacttgtcat tttttataca 60  
 ctaaagcang ctcatcaaga tgcataaact cagaaggcta aggattatgt tcagaaggtn 120  
 ggcataatta aacaccaaga gtttggactc aacatgaatg acctctacnc tggtatgata 180  
 aacacatgag ccatagggac ttctgatgta cctatgagac acaatgaact cattgaatct 240  
 tttgtaccac tactttgggtg atttcttcag ccataaaga gacctcttca atctacagaa 300  
 caaaaatttc ctttctttca cttcaaacc cttacaatgt tgcatt 346

<210> 4536  
 <211> 337  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4536  
  
 tgtgaaccaa tttaaaaaat ctttgaata cagtatgaca cgtattaatt attaaacctc 60  
 atccttaaaa ttaatatggg aggaccaaac ttattatatt caataggggc ttttaattgt 120  
 cttccattaa atggtaaaag ttcattttag taatttcttt aataaatggt tgcattcaat 180  
 taccaaagat gaactcttat tatgattaga gaacaaaata aaaattccta tagaaatcct 240



tcacacaaca acttatgcc a ttcatagaca caaaagtcta gatattgtgc tatctacatt 300  
ctcacatgtc tctagcttgt cataatctct gaaacac 337

<210> 4537  
<211> 156  
<212> DNA  
<213> Glycine max

<400> 4537

tggaagtcaa ccgataaaag aacaaagacc acaaagcaag gaggcttgtg tgggtggctgg 60  
ccaactatgg atcttgagtg atatttgga gatggcctct ggtaatcgat tacaaaggat 120  
gtgtaatcga ttacaaagct taaaaatggg gtcaag 156

<210> 4538  
<211> 426  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4538

agctcataag aacaaaattg cctaaatcat ttccaaatat gtatgtgaat tangattcat 60  
catcaagaat caagccaagg ctattgtgca agcaatcaat gtggcaaaac acaccaaatt 120  
attatgatga tggatgactc aaattctcac aaacgtaaac ttatcacttt caaattgagc 180  
tttcaaaact atcatgacat gtagaggaaa aacaaggatt tcaaatcaca aaatgtcaag 240  
agactttatt ttcagaacaa ttaccattta cttgaacata tcctataatt caaagaaaaa 300  
catgaaaatt taacacaaca aaactaaca aaattaaact agaaccacac aaaactaaca 360  
caattaaact aatttaacac aactaacaaa accaaaacca aagaacacac tccctcctat 420  
acttaa 426

<210> 4539  
<211> 285  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4539

agcttgagtt ctacataagc cttccaatct ctactagcaa gntgttttca ccttatggag 60

aaatgcctga tttgaaagag aagcatgaac agcttaaact tttcaggata aatgtcaagt 120  
 tgggtctcaa gatcaatggg aaggagttga gtaattactt gagcaacgag ggtgatgatt 180  
 ggattccact tccacaggat tatctgcatg ctttggatgt agttcttagg gaaagtccaa 240  
 ctgagaaatg catacctgta gggaggtcat tctattcaag ttcaa 285

<210> 4540  
 <211> 408  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4540

gaaaaatcta gtctttgtgg gtgtcgtgga tctaatttgt ttttcttctt gtgttgaaaa 60  
 tggagctntg caaattagag gaaaaatgaa ctttatggta atgcaaagga ctaaagcaag 120  
 gaaagttgta catccttcta nggtccacta taacaggctc tatcttaact atttcacaag 180  
 ctgggagcca tgcgtccaat gataatttgt tgtgacatct gtgtctagcc cacatgagtg 240  
 aaaaaggact ggaaattatg agcaagcgag gcttacttgg aaatcacaat gtggaacctc 300  
 tttagttttg tgagcactat gtctatatga agcaacatcg aaagaaattc ccaaagggtt 360  
 tgtagactac caaagtcaca ttggactatt gccattctta ttgttggg 408

<210> 4541  
 <211> 94  
 <212> DNA  
 <213> Glycine max  
 <400> 4541

catgcaagct tctaattacg agcgtctcga ttattacggg actcaaactt tcattccgaa 60  
 tttatgttat tgacggttga atttgctcag agca 94

<210> 4542  
 <211> 167  
 <212> DNA  
 <213> Glycine max  
 <400> 4542

tcaagcttaa gaaaagtcaa cgataataac ttttggactc gttgtttcat tgagtctcgt 60

tatatatcga gacgctcgta attgaaaatg ggagctctaa gaaaaggtaa accgggataa 120  
 cttttgactc agaatgtcga ttgtgttccg taggatatcg agacgct 167

<210> 4543  
 <211> 198  
 <212> DNA  
 <213> Glycine max

<400> 4543  
 agctctggcc aatctgatct atggaagcta taggcagcta attatttgaa ttgccgtttg 60  
 ctggctctcc cttttactta cctgggaata cccttaggag caaaccgaa gagatgtaat 120  
 ttgggggcac cctatatcca caaatgtgaa aaaaaggtag cgagggtggaa acataaaccc 180  
 atatcttttg gggggaga 198

<210> 4544  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4544  
 agagtttttc tattgatcaa gagggtttgt agcaatttgt gttttgtacc ctgtaactaa 60  
 atggatttgg aagntgaaat ttaatgggac ttccaattat atctgatgaa agtagatctt 120  
 tgcactttta ttcttggaaac tattaccggg attttggagc aacaccgggc taaataaagc 180  
 ctgttgcttg gggaaaatta ctaatctttt ctttccccac acaccttttc attctccaag 240  
 gtgcttctaa atatgtctcc agaactataa ttgagaattt aacagattaa atatggacgg 300  
 cttgatgtac gcacaaagaa agcgttccag cttgggccca agaagtcaaa ccctctatgt 360  
 aggaccatca caacttctca gctctttcat tgaach 396

<210> 4545  
 <211> 286  
 <212> DNA  
 <213> Glycine max

<400> 4545  
 gctcgaagac aagactatac gaggatcttc cttaggtata tttatatctc taagggttac 60  
 cgtgtctaca acttgcaaac taagaaactc gtcacagtc gagatgttga agttgatgag 120

tacgcttctt ggaattggga tgaagaaaaa gtggagaaaa acgttcttat acccgctcaa 180  
ctacctcaag aagaagatga ggaagaagac ctaggtgaac caccttcacc ttcaccacaa 240  
caacaagatc aagaactatc atcaccagag tctactccaa gatgag 286

<210> 4546  
<211> 369  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4546

tcttgactgt cactaagnga caacatggcc ggacattcta agaaacatth ctgatgggca 60  
ttctggagaa ccatgctaact actcattggg atgcttactg aaaatgacac catgcttggt 120  
gaatatecctt gctgaagctc atattgatat tttattctaa agccacacat cttcatcatt 180  
cataacactt attcacaact ctttaagcatt ctaaggctga ttactttaca atgacttaat 240  
gaaagtacac tcattgacgt gtaatcgatt gtccatgcta gactcagcag nggtctcaat 300  
cctgtggacc tatgcttctc atcggagctt ctcatggacc acgacttcat tctttaacaa 360  
tcctgtatc 369

<210> 4547  
<211> 402  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4547

aggttgctta gtattaggaa gtattgtgna cttaatthtt atggatcaac agatactccg 60  
aggttagggt aacttgatg aaactgttat ccggctggtg tatatcctat taagacttat 120  
atacgtgata gatacatata tacatatata tgatactcta atgatgcaca cgtgaataac 180  
cactaccacg atcaacatgt acatacgttt actcgtgcat ggatactctg acttattgaa 240  
gggacttggt tggtgacaca agcaataacg atgcttccat tctgtacctt taaatthtac 300  
gtgactthttg atgactatgg catatacatg aggacctgcc gacttgctta tctatataat 360  
agatgcgctg agccccacat atagactaag gaaacgacga ag 402

<210> 4548  
 <211> 326  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4548

agcttctgta ttcaattttg agcatctgta tatattacgg gtactcaatc ggatattcga 60  
 gtaaaaatta attgtcatta gaatttgctc agaagattta ttttcaatgt cgagcatctc 120  
 gatatattac gagactcaat cagacattcg agtaaaaagc tattgtcata agaattgcac 180  
 agagcttctc tttttaattn tgagtgtctc gatatattac gggactcaat cagatatccg 240  
 agttaatagt tattgccgtt tgcgtttgct acgagcttcc ggttcaatta ctagcggctc 300  
 gatatattat ggcactcaat tggaca 326

<210> 4549  
 <211> 333  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4549

tccgttgctc aattgcaagc gtctcgatat attatgcttc taaatcggac cttcgagtga 60  
 caagttatga tcatttgaat ttctcgatag ctcccggttg ttaatttcga gcgtcttgat 120  
 atnatacgcg ctggaatccg acctacaagt gaaaagttaa gaccatttga atttctcaag 180  
 agcttccatt ggtcaattta acccgctcga tatttatgtg cctgaatcgg acctccgcgg 240  
 taaatgttat gaccctttga atatctcgag agcttccatt gtcaattgcg accgtttcta 300  
 ttgtgatgcg cctgaaatgg accaccgagt aaa 333

<210> 4550  
 <211> 301  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4550

agcttgatgt gagaaagcgt ggaagagtta gtcttcttac tttngnnttg tgaccacaga 60  
 gtggtacctg gagatatgtc gcgngngtca agagaccttg gngacgtcag gtgggggtgct 120



```
<223>      unsure at all n locations
<400>      4553
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agcttgaaga aagagtcata gatgcttgta taanatctat aatttatagn ttggaattgc	60
aataagtatt attgagctca tcacctcacg aacgaattct attaattatt ttaatacggc	120
taattctttg gacataaaac ataataactt gcattttaca tgcatttgaa ggatcaaadc	180
agtataaagt aaaataaagg aaggtaataa ggagaaattg tttatctttg aaggacataa	240
tgagaaattg ttaagaaaat aatcaaatac tactgccag. ttagatactt tgacttggtg	300
cccaacagca attagagtgc atcaacaatt tctattttga cttagtgtgc atgtgcaaca	360
gcaattatag ctttcaacgg c	381

<210>	4554
<211>	298
<212>	DNA
<213>	Glycine max

```
<223>      unsure at all n locations
<400>      4554
```

ggacactatg	aaactcagct	tgacngatt	gctgttatga	ggattctttc	tttttagtat	60
ttatctttct	gtcggggagt	ttcactaggt	cccatgtcaa	ccctctaaca	tggcaactaa	120
naaatatgaa	gtacgtaagg	ataggtcatt	caagtctttt	tctaattgaa	tcaactagta	180
tcacttcgta	cagtatcctc	ttatcacgga	atgcgaatga	tgaataaata	agactttttg	240
tttcttacia	gggataacat	gatgagttat	ataactaaat	atataatcta	atttgttt	298

<210>	4555
<211>	302
<212>	DNA
<213>	Glycine max

```
<223>      unsure at all n locations
<400>      4555
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agctttgatg caacatttgg agaggttatt gaaacantga aatgatgtgc ctcatgagag 60  
gttggatcaa atggagaata gagaacatag tggaagagaa naggaggaga agagggaatg 120  
atggtgttcc tagacaaaac cgaattgatg gtattaaact caacattcct ccctttaaag 180  
gaaagaatga tccgaaggcc tacttggagt gggagatgaa aatagagcat gttttctcat 240

gcaataacta tgaggaggac cacaaggtga agtttgccgc cacggagttt ccgactatgc 300

tc 302

<210> 4556

<211> 311

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4556

agcttgctcc anaacacaat gtttgcttac ttgaatggaa ggagatcaag agnttttgaa 60

agtagaacca aaacataaga tcgcccagtg aggtaaaagc cgtcagctaa tgacattaaa 120

aaagcacttt ctgggaggca acccagnttt aatttctata atttttggtt tcatgcatta 180

aatcattggg aacttgctac ataatctgta cataggagta tatcagccta tctttgaatg 240

ttagatataa gggtttcaat ttggtgagga agggactgaa aaataactca aaaaatattt 300

tctaaaaaat c 311

<210> 4557

<211> 409

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4557

tcaagcttgt gcaaatcaaa tcaactctac atttcatctc tagcatgcat tnnnnntct 60

ttacccactc ctacgtttg gttttntagg gaaaaacacc ataactaaac gcgccgcaag 120

ggatccctat cgcaccagat ccaaacttag aacgatgggt gatcaagagg agacgcatga 180

acagatgaaa gccgacatgt cggctctaaa agaacaaatg gcctccatga tggaggccat 240

gttaagtatg aagcagctca tagagaagaa cgcggccacc gccgccgctg tcagttctgc 300

tgccgaagca gaccgcactc tcttggaac tacgcaccat cctccctcan acataatagg 360

acggggaagg gacacacntg ggcacgatgg cagccctcac ctgggatac 409

<210> 4558

<211> 297

<212> DNA

<213> Glycine max



<400> 4558

agcttctagc caaatgcact taccttgatt taattccttt gatagccctt ttgagccttg 60  
gttccctttc cttggtttga agctcactac aagccttaag tgaaaaacca tgatatcatc 120  
atataccttaa ggaattttgg agctttggaa ttgttttggg aataagtgtg ggggtttttg 180  
tttcattgga taacatgttt tgggtggccat gcttcatgat atattttgag ccatacttga 240  
tatacattgc atattgggta aatgttggac atgctaaata tgatgttgtt tctcaaa 297

<210> 4559

<211> 394

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4559

ntaatgtttc ttgccatca tcaatagctc caatcatatt aaaaactcag aatcatgact 60  
gacaacaaaa ctttaatgaa taaacataat aaggaacgaa aagaatatga taaaaaatgc 120  
aacctcaaat acaacaacag ttcagaattc ttcatgcaac atgtcatatg gaccagggaa 180  
aaaaaacaaa ttcatttaac aatcaagtca cataaagaga taagaagaaa attaagaaat 240  
gcagaattaa atcgtattat tgttgaaagc acaggagaca taaaggtagt aatgaatagt 300  
tgtaccttgg aaatcgcata aactaatgca atgcgttgtt gatgattgga attnnttact 360  
aagttattgt ggaatttgat tagtctggaa tatg 394

<210> 4560

<211> 349

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4560

agcttgactt tgcgagttga ttttagcctt attttcactt tagttattag tcaattcaat 60  
taggaaagag aaattccaaa gagaaacgtc cgattgattn ttttggttta ttttactaaa 120  
agataatttt tgattattat attattattt tacctctttt tgngttccaa cgtgggttacg 180  
acatgaccga acggtcggat ttcattttta cagaaattaa cggatattac aaatcanatg 240  
atcgggtggaa atttatatta tttttttatt agacgagaan atgacttang taaatgacta 300

aagcacgtcc aaagggggta caggaaagta atgaaatgag aataaaaagt

349

<210> 4561

<211> 333

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4561

atccgacagg atgaattaga ttctcattac tatgagatgt acaaaatata aaggcactta 60

gaaccctggg ctgattatcc aagaatgctc taatgattat ttttttcttc ccaaatacct 120

atTTTTTTTT cttttctaag taatttcaaa agcaacactt tcgcttagca aaaattaggt 180

ctcactaaag aaaaagtcac cttgaggcga aaggagtttg aaggactcct cgctcaacaa 240

aaaagaaggg tcgttgagaa aaagcattga tacacgcana cttaattaag acatttctcat 300

tgagcaaagt gataattttg cttagcaaaa ctg 333

<210> 4562

<211> 140

<212> DNA

<213> Glycine max

<400> 4562

agcttcgac tttatgacat atggaagttt catgtcggct agtatttggt tattgccgga 60

tgctgcctgt cccttttact tacataagaa cacccttgag aacaaaactg gaggagaact 120

cataaggggg accacacact 140

<210> 4563

<211> 167

<212> DNA

<213> Glycine max

<400> 4563

tgcacccgaa tcagacataa gtgtgaaaag tcatgactat ttgaatttct cgagagggttc 60

gcgtgttgaa agcttagcgt ctatacatag aattaccctg atctggacct gagagagaat 120

agttgtgaac atgagaaatg gacgagagct tccgagggttc ttttata 167

<210> 4564

<211> 381

<212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4564  
  
 ctgactggag acatTTTTatg accaaanatg tttgtgcatg gcgaggcatc aacaatgaaa 60  
 caagccaagg ctattgtgca cgccgtcaat gcggcataac acacctttcg actctgttta 120  
 cggagaggtc taaattttct tactgtcatc tttctaaaag atttggccaa accttctctt 180  
 caaaaagaag tctttgtcaa aaactgtgga atcatctttt taatctctgc tcctttgcta 240  
 aaaaacaaag actaacgggc tgatcctttg tgctctcttc tccttacaaa aagccaaaga 300  
 ctaccgcctg gaattcttgg gtctccctcc cttaacaaag attctaagac aacccctga 360  
 aatttttgtt ctttacaaga t 381

<210> 4565  
 <211> 303  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4565  
  
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 agaagggtc tcttcacttt tatgtagcag ccattgtaat caatattgat cctcatcacc 120  
 atgcagaagt actgcaaacc aaagaaaaca aaaaggattc aaatggtatc tatagaacta 180  
 acttaattaa gaaaaccaa agatgggtgat tagagcttgc cttcaatgtc atgaaaacca 240  
 tccaagagag agagaaagta acaggaattt gaaaatcaa aatagtatga gtgagctagc 300  
 aaa 303

<210> 4566  
 <211> 361  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4566  
  
 aagctggaat catttatTTT atctccgata gtctatgggt tatgtccgtc caggtagtgc 60  
 cgaagaatac tggcctcaca gtgatcataa atgagaagga ggagtttatt cctactcagg 120  
 tgcagaacag ttggagagtc tgcattgact attggaggct gaaccaggct accaaatagg 180

accattttctc cctgccattc attgaccaga tgcttgaacg cctggcaggt taatcccact 240  
 actgtgtcct gatgagtttc tggatatgc aattactatt gctctgagat cacgaaagac 300  
 cacttacctg cccataggac tttgctataa gagatgcctt ctgctggcat gccctgtcc 360  
 t 361

<210> 4567  
 <211> 317  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4567

ggcccgggat ccttaagcac ctgcagctgc agctgatttt tttagtagga attatccttc 60  
 ctaagatgga gccaaaccca gtcaccatca ttaagaacta tctcttttct tctctatag 120  
 cctttagntg aatacacctt tgtttggatc tctatttggg tcttaaccct ttcattgcaac 180  
 ttctttacaa actctaacct agattcccct tctttatgta taaaagaagt gtccagtgtg 240  
 aggggaatga ggtctaacgg tgttagggga ttgaactcat agacaacctc aaaaggggac 300  
 tgcttggggg ttctatg 317

<210> 4568  
 <211> 356  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4568

tcgaatgggc atcgtttcat cttatttgcc aatgatattt ttaccaaagg gtggaaaccg 60  
 gcctcatatg ctaacctgac taagaatgtg gtgggttagaa ttcattcagaa ggagataatt 120  
 tgcagatatg ggttacccaa aaagataatc accaataatg ccaccaattt gaacaacaaa 180  
 atgatgaacg agatgtgtga gggattcaag aaccaacacc ataattcgac gccttatcgg 240  
 cccaagatga atggggcagt tgaggcttgc caataaaata tcaagaagat tattcagaag 300  
 atgacaatgt catacanaga atggcatgaa atgctaccgg tcgcattaca tgggta 356

<210> 4569  
 <211> 387  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4569

agctntntgt tgttttttgaa aaattttattc cagacttcgg ataaacttta atttatggct 60

aattcaagac caactttttg atatatttct tgctaggact atccctaata ctagggataa 120

ttagtaggac caaataaatg gaggttgctg aattatacca catgatttca gcaacaacaa 180

aagttgcaat aaagacaaca atgatatttt ttttattgca ataaagacaa caatgatatt 240

tatggacatt atcaatgttt cccatgtgta atcctttata taaaccttga gctgggcaca 300

cagtaagatg aaagagaccc cgntaatata ttatctaaca ttctgcaatg atgataaact 360

atttctcttc ttcttcaaaa aaaaaaa 387

<210> 4570

<211> 366

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4570

tgaaggtgcg tagcccacca ttttccttag gagaaacttg gtaatgtgtc tactatcaat 60

gcaatcgntt ttttcgtcat tgaggtggca cttgggcctg cacggtcctc acctttgggc 120

gtattctttt gaagaatcgg ggcccccttt ttgcacaaaa tttggaggtg catcctatcc 180

caagccatta taccgacact gcctaacgaa ggcaccatta ggtcctccca gaatagactc 240

gggaaggtcc aattagtgtg tcnggtaaca ctaccccgaga agactttctt ggaagaatga 300

tcaacaattc tatcttttgc gatgccccat cttcgacata catcttagat gctcttgggc 360

aagtac 366

<210> 4571

<211> 462

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4571

atgacnaccg tgctcggacc cgcggancnn taatttgatc ctttganngc cagcnnngan 60

gatagaggcc tcaccgctgt ataagacaaa gtatgtctct aacgaggcta tatttgatca 120

tcacgcctct acacactgcc aaaaacacct cgggccgacg atgaggggtga gaatgaaggt 180  
 agacttccat gctgacgttg ccatttctat acagtcattgt ttcccaccaa cccaacaatg 240  
 tctttactct gcctataaca aacctgttcc ttaccctccg cctaattatt taaaaggggt 300  
 atccctatat caaccacaaa atatgtctac cctacttgca atgacgaata cccactctat 360  
 accttcttaa aacaccacca acaaatgaat tctgtctaac aaagccttat aaatatccca 420  
 tcacgagcgt cccatgctac ttgctcccta tcaatagaaa ct 462

<210> 4572  
 <211> 188  
 <212> DNA  
 <213> Glycine max

<400> 4572  
 tgtgcaaatt aaatcactcc tacatctcat ctctagcatg cattttcttt ctttaccac 60  
 tcttcacgtt tggtttttta gggaaaacac cataactaaa cgcgccgcaa gggatcccta 120  
 tcgcaccaga tccaaatcta taacgatggg tgatccagag gagacacacg aacagatgaa 180  
 agccgaca 188

<210> 4573  
 <211> 327  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4573

agcttattta ttcagttgaa gttgcacata tctttatgat tattgagatg ataggtaaaa 60  
 tgggaaccca gctttggcca accatttggg ccagccttaa ccataacttt ccttgatggg 120  
 ccctaaaaat ggattaaaaa gtggaaggct ctaattataa acctttaaaa tataaaaaat 180  
 aaattaaaaa aatctcaaat aatttagtaa tgtaagatta atcanaatat agtcgtggaa 240  
 aagtatatgt tcttacaatc ttttagcgat ggatatattt atattaactt aattgaactn 300  
 atcttttata tttatatcga tatcaaa 327

<210> 4574  
 <211> 338  
 <212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4574

ntgatgttat ttttttatgc atcgctntga tttntgttt taatgttngt gctagtccaa 60  
atTTTTTTTT aataattttc ttttaataaa actcatttca tgatattttg caaagtgatg 120  
catatcaagc tattggctac taaaatttct tacctcaatg attattcaag tcaatagtga 180  
aatagcaatg ggtgcaacca tttccccaat tctgcatacc gaaactccca gttcaatatt 240  
agtgtactta tctggaagga taatcccaag aatcttcta gtgattaatc tgcaaatgga 300  
aaccagcctt taagcatctg gggctctcatc tcattatt 338

<210> 4575

<211> 351

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4575

ggaggggttat tccacccgct cttatggatg accacagagt gtgacctgaa gatttttgac 60  
tgggctatcc attattgggg aaccacgaga gctgctatgg acaaaatgca cggtagacat 120  
ttccgacca tcacggggta gacggggcca cgcaacctgg gatgggccta aacggaccag 180  
cttctggcac gtaacagagg ttaggaacaa gaaccacttg gctgggaagc gtcgcgggga 240  
tggtcatctt agaatttttg gcggaatgag gactatatgc tatggttcat catcacaagc 300  
ctaatacatg aagactaacg cgttgccggg ctcttgcatg ngttacaaa n 351

<210> 4576

<211> 330

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4576

ttgcatgcaa gctntataca attaattaag atcaatggcc aatatacaat taattaatta 60  
catatatact tatatagtgg gagaatagtg tctatcagag ttttaatttt ttgtactgtt 120  
ttaattacaa agacttcatt tatttttttt taaaaaaaag ttgattcatg gattatttta 180  
aaattcaaaa gtaaagtatt tccactcata ataccaagga ataatagtaa atgaaggaaa 240

tattttattct ctatttctat aattaacttt agaaaaaatt tattaattaa actagctata 300  
cctgggttata ttgttttgac cccctttttt 330

<210> 4577  
<211> 382  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4577

tgtgcggtga actaacctcc tttaacatgg aattgttgat caattgtgat ttgatacata 60  
ttgatttaac taggaagggc aggaaaaata agggaaagat catatttgat gtggacatcc 120  
ncacagatag tgttttcaga ttatagctta cacagaatgt tagcataaat atagttcaaa 180  
tggctgaaat attttacttc ttagaattca ttcattatat tattactaat ttaaggatcc 240  
tggtgacaaa tatgattggt ttaaattgaca tcaaaagtgg atgaatttga ggtgtaaacc 300  
tatattgtat gtttgacttg aaattggtga gaacgacaag aggggtcatg tgataaatat 360  
tggcttttca ctattgatag at 382

<210> 4578  
<211> 345  
<212> DNA  
<213> Glycine max

<400> 4578

agcttttatg tgaaaggatg tgactcttca tatttgaatt tgaatttcaa cgttcaaagg 60  
cactagtaat cgattaccaa aactttgtaa tcgattacaa ctttttgaaa ttaattggaa 120  
cgttgtaa atcaatttgaa aactttttca aaacaatttt gctactggta atcgattaca 180  
acaatctgat aatcgattac cagagagtaa aaactctttg gtaaacaatgt tttgagaaaa 240  
atcatgtgca actcaatttt tgagaaaatt ttttcatatc ttatcttgat taagccttct 300  
cttgattcat gaatcttgag tcttgaatct tgatgttgat tctct 345

<210> 4579  
<211> 355  
<212> DNA  
<213> Glycine max



<223> unsure at all n locations  
 <400> 4579

tttcgattca ttctatgtac ccgtagtggt ccacattgtg tttcgtgcat ttttattctc 60  
 gttttgttta ctttttatac ccnctgttga cgtgcttaag ccattttact taagtcattt 120  
 ctcgcttaac ttaaaaataa aataaatttc caccgaacgt ttgaattgta ttatccatta 180  
 acttcggtta aaataaattc cgaccgttcg gtcgtgccgt aaccacgttg gaaatcaaaa 240  
 agaggtaaaa aataatataa taatcaaaaa gacatctttt agtaaaataa agcggaaaat 300  
 caatcgggac gtttctcttt gggaattctc attcttaatc gaatngatta ataac 355

<210> 4580  
 <211> 335  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4580

agcttttaag tgcgggttta agacgcgtat gccaaagtc cgcgatatgc ggngatgact 60  
 ccccgaagag atcggatttg gtacggccat gtcctcccg tttctgacta ggaaattggc 120  
 gagtgaggga acgcccagac gtttacgcga aaagcataat gtaacctttt gtagctntaa 180  
 aactctacgg ttgggcctag gcttttagagt ttcctttttg ttaaagcatt atgtcttttg 240  
 tttttgaagt tataatataa agatctttct tcatttgntc ctgngcctct atccattctc 300  
 attcattttc atggttattt ctttactctt aaagc 335

<210> 4581  
 <211> 334  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4581

tcataatgaa tcaagaatga ttcanagagt tntgatgata acaaagatga tgacaaaaag 60  
 ttcaaaagtc aagaacactt atgataacaa agattatgat ctcaagaatc aaagaatgag 120  
 tttcagattg aatcaagtac acttcaagga tcaagaggaa agttgaattc aagttccaag 180  
 aatcaagatc aagattcaag aatcaagaga agactcaatt aagataagta ttaaaaagtt 240  
 ttttcaaaaa ctgagtagca catgaatttc aaaacctttt acccaaagag ttntactctc 300

tggtatcgat taccagtagc aaaatggttt caaa

334

<210> 4582  
<211> 358  
<212> DNA  
<213> Glycine max

<400> 4582

agcttgcttc tacaatctcc ccctttctga tgataacagc cctgttatca agaagcacat 60

acacacagct tgtgctagac gatcactcac ttaactttgc atattctccc cctttgtttt 120

tgagtttatg cttgacttga aaataaggta aatacttatg tgagctcttg acgtaatccc 180

tatctctatc cccctttggc ataaaaaaaa gcagacaaag ggtgtaacag atattacaca 240

tatataaatt actaattatt cacaagacgt tcattgagaa atctaaacca atcatgaagc 300

tagaaacatg aataaatcag atatattaaa actacatagg cgtataacat aatgcata 358

<210> 4583  
<211> 414  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 4583

nttggacncc cctagctatt ttgagacctt gaatactcag cttgtncatt gtagaccttg 60

ccctggataa tagccaaaaa atgttataat atgacccttt tccgaagtac tggcttttaa 120

cctttggagg gtattaataa gggtagaagt tgggggttct aatttatggg gtgagcttaa 180

tgagtcttaa gccactttt gcttttggac tgatttaata caatcatgag aaccatggat 240

gtatccgtct tcaaaaaaca cataaaacag aaatttgacc attaatacatt acccaccaaa 300

aactgatagt agaatcattc nattaatttg aaaagtggcg atattgcagt ctgcaaaaca 360

atagcatgac ttacagacaa agttgacaga tgatggttga cagacagcat agtt 414

<210> 4584  
<211> 206  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations

<400> 4584

agctntgatg atgtggtctt caccgatgaa aggatcaaag taggtctaaa aagaggcaaa 60  
tctgatcatc atgctttgat acatgccaaa aaaaactagg gcaaatgaag agggtgagaa 120  
tgaggggagaa gcccatgctg tggctgccat tcctatacag ccatgtttcc caccaacca 180  
acaatgtcat tacttagcca ataaca 206

<210> 4585  
<211> 82  
<212> DNA  
<213> Glycine max

<400> 4585

cggggttcggg agacaaagggt caagcgttct cgatatgcga agatgatatt ccgagtactt 60  
tggatttggt acgaccatgc tc 82

<210> 4586  
<211> 285  
<212> DNA  
<213> Glycine max

<400> 4586

agcttgtact ccattgaatg cccattgtg cttttcgatc tgcttcctac ttccacaatc 60  
ctgctccctt cctatcttcc tccaaatcaa agtccataga gtgctttaac atggagaagc 120  
ctattttcaag ctacatttca ctctcttcac ttgaaacacg atctttgtca gatctataac 180  
taccctgtt acaaccacaa tgggtttacca ctagaatggt atcctccaca attcttacta 240  
aatgaatcgt gacattgatc attaccctta acgatgaaaa tatca 285

<210> 4587  
<211> 381  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4587

tataatcgac tcttctcttt cactttctaa ttgcgaataa aaatgtaaaa taaattctct 60  
cataattttc actcttcata tccacagggt tccaaacaag ataatgttaa atgcattcat 120  
aatcttcaat tctttgaaca catttctgaa tatttttgggt ctaacaaaga ctcttaagtc 180

tgaagaaaaa aaaataagaa tgacaaaaaa aaagactcta ttttccttct ttagacgtca 240  
tcaaacgaaa tcaatttttc tttttttatc ctggaagagc cgaatcanat tgtanaatat 300  
tacataatga cccanagggtc anaatcaggt tntgctggga acatanntta cgaatctact 360  
acaataaaga ctatctaacg c 381

<210> 4588  
<211> 307  
<212> DNA  
<213> Glycine max

<400> 4588

agcttgagga gggtaaataa gaaaaaatac atttataatt ggtgcctgct ttagtagat 60  
aatgctacca aggcttgtgg ttaaactaat ataatttttg tgtgcttttt cttttcttta 120  
agcttctcgt gtgtagttac tgcataattha ttttaattta tgaaaaatct tcatgttaaa 180  
acaagactaa cttagttcat gcaagaaaag atttttcata gagtattcag ctccagaagc 240  
agagcctacg ttttttataa tattaattaa agaaaaaaaa attgaacttt tgaaaaagca 300  
gttctta 307

<210> 4589  
<211> 387  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4589

taagccacca gctcgcttng cgtgctgagc atgccgtggt gagctgggtg gcaagctcct 60  
cctccatttt tctataaaaa tggcattgga ggctgagggg aaggggtcca acacctttgg 120  
caattagatt tcacttaaaa ttagtgagga gaagaagaaa gaaggagaaa atcaagggtcg 180  
aggcactttc ataatgcttc catgacgttt tcgtgatcaa ttccgtgaac atttttcggt 240  
cttcttcggt cattattcgg ccgtcggcga tcttcaaccg attagttttc gatttcggag 300  
ctttgaattc attcttgctt ttgattgtnt cattttcate tcgtctactt ttagtattct 360  
ttttcttcgt ttttaagtga tttcaat 387

<210> 4590  
<211> 304

<212> DNA  
 <213> Glycine max  
 <400> 4590  
 agcttcctcg gtgccattcc tgcaaaggca aacatttgga aagttagttc taccagtggg 60  
 acattactct taaagcaaaa atggcatata acctccttcc ataaatacaa acatcaatgt 120  
 aaatttagag caagcttatg cgcataattc cttacaaacg ttctcttgca caagacattc 180  
 tattaaccga aaaaaatgca cccatataca atcaaggcag cttcggttacc tagattattt 240  
 acacgtactt ccaaggtgta tttgttactt acatcacaca catcttcttg gctaaattca 300  
 cata 304

<210> 4591  
 <211> 246  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4591  
 attcagaaga ttagagttta tctcttttat cttagcgaga gtgattctcc taaattcttg 60  
 agtgattcaa gaacaccttg gctgtatcaa aggactttca caacctttgt gtgttgccct 120  
 cgctggaaaag agngattctt tccttccttt catcatcacc cttgttcttt cataccacca 180  
 ttccagaaaa tccacctctg cccagaatta tctcgtgggc ataactccaa tntaagcact 240  
 caaata 246

<210> 4592  
 <211> 302  
 <212> DNA  
 <213> Glycine max  
 <400> 4592  
 agcttaagcc ttctatttca tcaaatagtg ataacgcttt cttcacctca ccaatcttgt 60  
 gaagagaatc cataaaaaata ttatatattt caacactaac atgacctttt tctttcaatt 120  
 ggccaaatgt ctctaagcc attatcggtc ccttcttctc caccaaaaca gagaagaatt 180  
 tggagagatc agcaataaca ggaaaacca acttctgcat ctgctcaagc aacttgcaaa 240  
 attcttccat tctattcgct tcagcatatg caaccaacaa cggtttcacc cgtaagaagt 300

ct

302

<210> 4593  
 <211> 340  
 <212> DNA  
 <213> Glycine max

<400> 4593

tggagggagg tccctcactc gtatctgtca ggtgatagtg gcaccataa gaaagtattc 60  
 atgtgaagca cctgatgaca agtctctttt atatgaaatt acatatacaa tccactatct 120  
 tatcaaaata tggcaatcct gtagtcatta attctccaat ccttcagtta ggttataata 180  
 tctgaaatgc tagctatgac cagattcttc aactcagggg aatatgataa tgtggaattc 240  
 attttaagaa tgcttcgtgc attcggcact ggcacacat aattggaatg ccgttgatga 300  
 tgcccgcag tagcataaat aaactaacgc tagcagaatt 340

<210> 4594  
 <211> 344  
 <212> DNA  
 <213> Glycine max

<400> 4594

agctttatga agttttctgg ttttctaaac cttgaaaact tgtgctattc atcctcttca 60  
 ttctcttctc cctttgccaa aaagaattcg ccaaggatta accgcctgaa ttctttttgt 120  
 gtctctcttc tcccttttcc aaaagaacaa aagactaacc gcctgaattc ttttgtgtct 180  
 cccttctccc ttgtccaaga attcaaaacg acacagtctg agaattcttt tgattcttcc 240  
 cattccctta tacaaaagtg ttcaaaggac taaccgctg agaatttttt gtatcccagt 300  
 cacaaagata aaggtttaac agccgagatt ttgtttaaca catg 344

<210> 4595  
 <211> 303  
 <212> DNA  
 <213> Glycine max

<400> 4595

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 ctgaactctt ctctgtcacc tggttcgtcc attatcaaac accaaaatca aaaatgtcaa 120

cggc aaattg ttgaaagttg aaactctctc taactctgaa tcataaacac ggaaatcggg 180  
 atgatggtgc taaggaacac agccatggac tgaagaacaa gacagaaaca aattaattaa 240  
 ggtgatggta gtagcattag aagagtgtgg gatgaaaggg gaaaacgcag tgtgtcagtg 300  
 gag 303

<210> 4596  
 <211> 295  
 <212> DNA  
 <213> Glycine max

<400> 4596

agcttttaca aaaaggttca tcaagtcaag ttgaaatatg gaagtaacca tcctgcaaaa 60  
 ttggggcaaa agatgaatcg agtcacatca ctgcttcgtc tactgccaaa catatttagg 120  
 attattgatg tccttggtac ttccagtttc accttgacaa agatgtcatg gaccatgttg 180  
 aaaatctaaa ttgattcaac cccatatact gcgtaaaaat tcgcaatact tcgactgtac 240  
 atcattcgca tgcattccatg cttttcattg gttgcattgc tcattgcatt ctttc 295

<210> 4597  
 <211> 298  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4597

tgtgcttggt tttttaaatt cctaggatca tgagcaacct ggtgtgtcct gctatgactt 60  
 gagaacaaaa agggatcaaa taacaggccg aaattaaaaa gtactanggt tgccctcctag 120  
 tagtgctttc tttacgtctt gagctggacg cgtgatggca tgtccgtcac ggacctagta 180  
 ctttgcttac ctttggtttt ggacttgggc gcctattggg cggnatggg tcgtaagcaa 240  
 tgctctaacc tttntttgga tgatctgagg tgaactctaa aggtgatggc ggtgcgtc 298

<210> 4598  
 <211> 315  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4598

agcttctaaa gtctaacctata ataaaagcat acctgccagc atcttcaggt tcatctaact 60  
 caaaagcatc aaactcaaat ctttctgggt tagtaacagg catacacaac gtttccacac 120  
 atactaagcc ttccttggtg atgaaaaatt tgttgatttt gacgagaacc tcaatacaat 180  
 cttcaagcac atattcaacc tttttataga atgttctgat agtgccaaaa agaagtttagc 240  
 caagcactct gtaggatata gcatcaattt cttgcaaat cttgtctgcn gaaggtaaaa 300  
 atgaaatgaa aataa 315

<210> 4599  
 <211> 360  
 <212> DNA  
 <213> Glycine max

<400> 4599

agcttagcta agccaaagtc agagatcttg gcattcagat ccttgtcaag taagacattg 60  
 gttgccttaa tgtccctgtg tactattttc aaccttgact cctcatgaag ataagccaat 120  
 ccccttgcta tccccacaca gatcttcatt cttgtgggcc aatacaagtg cagcttctgt 180  
 tcatgttcac ctacgggaaa tgcgggggga aaggaaataa gctttttctg ttatatattg 240  
 attttgaagc agaaacatac acacacaaac acaaggtata tgttgcccg aaagcattta 300  
 ccgaaaagtg cagcagcaag actggtggtc tccatgtatt catatataag tagcaactgg 360

<210> 4600  
 <211> 342  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4600

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 tcattgacat cttttgtctt gaatggaatt gccatgacag gcttattgtt actgtctttg 120  
 atgttcggca gttgatattg tgttgcgga ggtaattccg attggattaa ctcaccatcc 180  
 ttcacttgcc aatttggtat gacaatttgt gttggatcac ctatgatgtc ttgtttccaa 240  
 aggtaattcta tatccattct gatggcataa gcatgaaacc aatcaaaaaa aaggacatta 300  
 attttgactc tttcgacgaa ttcgtagaac ttgtcttggg tt 342



<210> 4601  
 <211> 304  
 <212> DNA  
 <213> Glycine max

<400> 4601

agcttgccca gagaaggagt ccacagagga aatgcttacc accttataag actggaaagc 60  
 ggttttcta gactcctctg cggcctccac ataaggcata gaggatgggc agctcaccaa 120  
 gatgtcttcc tcgcctgaca cgatgaccaa atgccccctcc actacgaatt tcaacttttg 180  
 gtggagtgtg gagggcacia ctcccattga gtggatccac ggacgcccc aacagacagct 240  
 gtaggggggg ttaatatcca ttatttgga ggtgacttga caggtgtgag ggcctatttg 300  
 tact 304

<210> 4602  
 <211> 407  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4602

tttgggtacaa agaagaagaa gaagttcaaa gagattcatt gcttgtaaag gattgtaaga 60  
 gattttttcaa aatgcaaaac aaagccttgc ttttatagac tcttcatgtc tggtaagaa 120  
 gaccattcag aagagttatg actttttagaa aaacttaaaa cccatttgaa aaagtcaaaa 180  
 cctttttgaa gagttacatc ttttagatctt tcagagacaa aacttggtaa tcgattacca 240  
 aataagtgtg atcgattaca ccaaagcttt gagtgaaagg atgtgactct tcacnattaa 300  
 atttgaattt caacgttcaa ggcactggnn tatcgatacc anaacattgt aatcgattac 360  
 agccttttga aatatttgga acgttgtaaa tccagtttga aatcttt 407

<210> 4603  
 <211> 377  
 <212> DNA  
 <213> Glycine max

<400> 4603

agcttgctgg ttagtttggg agcacatatg tagtttggtt atgtgtaatt tgcagtctta 60  
 cttgttggtg atttaccat ggtttgattg ctataaattg aagagaaaaa ttactattt 120

agtgtggatt ctacactttt tttttttact ttaatccaaa tatttcttct tgattttatt 180  
 tcattttctt ctcttcttct caatcaaaac ataactgaca ttcatatcta attgactcaa 240  
 ctagtatagg ctagtttgac ttttttttcc ttcttgata aaagaaatca aattcatata 300  
 taatagaatt taaatatcat tacaagatca attattaagt ttctaactaa gaaatggtat 360  
 tattgattct atcattt 377

<210> 4604  
 <211> 281  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4604

atttgatttt ttatcataaa ttatgtttat aaaatatata atatttctct tgagtaaaga 60  
 tataatatat tattttctta tcgntgataa aaaaaaatta ttttcttaat ctactggat 120  
 atattttccc gaactggctc tatcaactct ttaaaaaagt gacactgtta aagtctcacc 180  
 ttaagttgaa taagaaattt aatgtgacac tcaatcactt ggacattgat tcttgattct 240  
 taaatggaga atgaacacca tgtttgctat aaattctatt t 281

<210> 4605  
 <211> 317  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4605

agctagccca ggaactaatt atatctatgc ctttaagcag gccattttta tatcaacctt 60  
 atctgcggaa tcacttctta ctaatgaaga ggctagcata gctgctgccg catccgaaac 120  
 tcttgctctt gctaaagcag ctgtgcaggt tgcaaaggat gcagttatac taagtaaaag 180  
 gaagcctcca gcagatgcag angttaaatc ccatgtttct tccaaatctg atgatttact 240  
 tctcaaatgg tttcatcaaa tggaagcgga agatggtgta cacaaaagtc atgggtgctg 300  
 gagcaaaata atggaag 317

<210> 4606  
 <211> 222  
 <212> DNA

<213> Glycine max

<400> 4606

agcttgacca ggaattatTT gtatgggttg gatgttgaat tccggttggt cctgggtgcgg 60  
agatgatggt acagcgggtg aacccaaaagc ggaagtttct tttggtgagg tagccatgga 120  
aaagcagagc gtttggaatg atttcgtaaa tctcagaagg ctattgggaa atgctggtaa 180  
aaacacgaat gccaaacaga tataaatttg aatgaaaaat gt 222

<210> 4607

<211> 195

<212> DNA

<213> Glycine max

<400> 4607

agcttgctat gcaaataaca tctgcccttt tctttttaag atttagctgc gacgacgaag 60  
ccatgagttg aatagaccac catactgtct tacctttccc cattgtctag cacatacttt 120  
cagcccatat gcaaataaca ctcgattatt ccatccagat taaaggatag tttgctacga 180  
tttgcataat ttgag 195

<210> 4608

<211> 358

<212> DNA

<213> Glycine max

<400> 4608

agcttgcca agaggttctt cacctcagta taacctgcat caaccaattt cagatcatgt 60  
agtaaacaca tcgatctgct atatcattaa atcgagagta aaccatcaac ttcattcccta 120  
aactaatact ctctctgtta aatagtcctt aaagtaaaac aaactatgaa agtgtttgaa 180  
atcatattaa gtagtcacca aactactaaa aaatccttca gttgggtcgt aaacttcact 240  
aaaatacgtt aacagaggga ctaaactaaa gtgatggata ttcaattctt taaagattac 300  
ttaaacaact tcattacttt aaggatcatt tgagagatca acagtttaac gacaaaat 358

<210> 4609

<211> 386

<212> DNA

<213> Glycine max

<223> unsure at all n locations  
<400> 4609

agaataactaa gcttttctccc tttcttttag aaatccaggc ttcgaactgt ttcttacact 60  
cataacaaat ggcaatttta ttccttttc cgtttgggtg taccaaagct ttaagaata 120  
agggtgggggc accaagtctt ttttgaatca tttggtaaatt tggctgaatt cattttaaaa 180  
attttatgga aagacagata tttgtttgat aacatttttt accctgngtg ctgactgat 240  
agcttatgca tatagctgaa tatatattat tacatctgaa ctccagatgc catacacaac 300  
aatttagagt aagcaaccat catttaacaa caatttagag taaggaacca tctttaagtt 360  
ttaatatcaa caacgaaatt tattct 386

<210> 4610  
<211> 296  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4610

agcttctatg atccgtcaaa atttcaatgt ggtgccccaa taggtattgc ctccacttct 60  
taacagcagt ggtaatggca gctagttcac gaacataggt gaaggagctg agtaacttat 120  
ggcaaaaactg tttgctaaag aaagctatta agtgtcttcc tttgtgacaa cactgtgccc 180  
attcctgagt cggaggcgcc tgtttccacc acgaagggtt tgggtgaaatc aggaagtgtc 240  
aatactggng aattattcac gacattcttc aagttttgga aggcaactgt agcttc 296

<210> 4611  
<211> 290  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4611

atttccaaat atgcatgtga attangaagc atcaacaaga atcaagccaa ggctattgtg 60  
caagcaatca atggggcaaa acacaccana agattatgat gatggatggc tcaaattctc 120  
aaaaaggtaa acttatcact ttcaaattga gctttcaaaa ctatcatgac atgtagagga 180  
aaaacaagga tttcaaata caaatgtca agagactttt aatttcagaa caattttctc 240  
atttcttgaa catatcctgt aatttcaaag aaaatatgca aaagtgtaca 290

<210> 4612  
 <211> 382  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4612  
  
 tccatcaaca tgtagaggag aatcaaggat ttcaagtttc aaaatgtcaa gaactttttt 60  
 tttcaaaaca ttaacccttt cttgaacata tcttttattt aaagaaaaac atgccaagtc 120  
 gtacatgcac acggaattga cccaaaatat taaactgaaa atccgacgaa actaacaaca 180  
 tttgcaaatt aacacancta acanattaac aaaaccaaca aaactagcaa aaccaaaagaa 240  
 cactccaccc atacttaaac aacacattgt cctcaatgta gcacaattaa nagattaaaa 300  
 acaattaaat catcaaatag aatccgacaa gtgtaataaa agcaaagaag gagataggaa 360  
 nagaanaaac tcctaagtca tg 382

<210> 4613  
 <211> 127  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4613  
  
 agctttacag cagtatttag taatgacttc ttaacctaga attaaaataa cttaatgcc 60  
 ttaacctagg gaaataaaac aaactaaatg actgagtgtg actgaaattg ttggcaacca 120  
 aaagtca 127

<210> 4614  
 <211> 279  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4614  
  
 agcttcagag tgatgctntg cgtgaagcca tttcangaat catggcttat tcccaggaga 60  
 agaatcgcaa atttgtggag accatcgaa tccaaatcgg gttgaaaaac tacgatccac 120  
 agaaagacaa gcgtttcaag ggctctgtca agctgccccca catttctcgc cccaagatga 180  
 aaatttgcac gcttggtgat gctcancatg ttgaagaggt ctctatttgc catattcacc 240

aagactctta atggatcata actatttcat gataattag

279

<210> 4615  
<211> 328  
<212> DNA  
<213> Glycine max

<400> 4615

tccggtcttg cgttcacttc attggtctgt aacattgtct caaaatcagt ttcttgttgg 60  
tagggaaaaa gttctggcca tccaaggcct agaaactgaa tgatcaatta gggttgtcaa 120  
ctttttaatt tacctttctt tggccaggat gaactaattt tatatatacc aataaactat 180  
gagagttaa atcatttatt ttaactctat acatttataa actaaaaaat gtacatcaag 240  
tttaagggaa ggatgccga taaaaaataa aaaaaaaggt taagtatgaa aatatgacag 300  
ggaaaccggt tatgggaatt ctcaaat 328

<210> 4616  
<211> 333  
<212> DNA  
<213> Glycine max

<400> 4616

agcttgccac ccagctcgcc caggtgagct aggttgcttc ctctataagc aaccgccttc 60  
tagaggaata ttctggaagg cccaagtggg cctgggtgct atttgaacc ccatTTTTac 120  
taaatacacc tcttgctctt ttttgggtgat tcttttaccg taacgttatg aaattttaca 180  
aatttcgtaa cgatgcttgt tttctttccg taatgttacg aaaccttacg gattacgtaa 240  
tcatcccttt ttttccttcc ggaacgttac gaaactttac ggattgcgca ctaacacttc 300  
cttttcaatt tccggcatgt cacggaactt cac 333

<210> 4617  
<211> 397  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4617

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agtaccacac actggatttc ctataagact gaaaagcatg agggacacat caaaaaatca 120  
 ggcattataa atgaaacagc atacagagaa tcagattgaa gtctagaatt tttctcacat 180  
 caatatattt ttgtattgtg aacggagtgt cactgaggaa atctcattgt cttgcaaatc 240  
 tacaagctgc aatttgggac aaatgttgtc acccatgtcc aatgtattgn tcaatgcatt 300  
 tgttcgtagt ttctctgtgaa aatatgaaaa ttatgatgac tatcattcta ttgttggata 360  
 actacctatg atcaacataa aagttaggga cttacac 397

<210> 4618  
 <211> 329  
 <212> DNA  
 <213> Glycine max

<400> 4618  
 agcttttgtc taatatctct tccgaaacct cacttagact taattattat atagatcact 60  
 aaacaccgcg aaatcctcac taatttgggg ttgacgccta gctcacatat taattctctg 120  
 gttgaacgta tagcccaact ccaccatgat aaaggattag caaataaaaa ttgaattcaa 180  
 aaattgtaaa tggagatttt agattcttag tcgattgcta agataactta tatgtgtgta 240  
 tcagtgatat aagaaataaa gcgaaacgaa aatatagact ctatagagat ttgatttaa 300  
 taacaaagca accgatcgac taattactc 329

<210> 4619  
 <211> 173  
 <212> DNA  
 <213> Glycine max

<400> 4619  
 agctttttatc ttgcgaaaaa tcataaattt tctaaaaaag tgggactttc ttagaaggct 60  
 gaggttcaca aaaaaattta agctttttgta ttgcgagaaa taatgaacca aacataatgt 120  
 cgtccgagaa tcacttaaaa caaacttggt tgacataaaa atcgaagctt ttt 173

<210> 4620  
 <211> 188  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4620

gtttttaaaa atggaattgt tttgcaaaaa aaaattatag gccaatgtta attttagt 60  
 ttttttggtta gccaccagga ttgaatcgcc aagcgggacc tttcccttct tccctttctt 120  
 cttaaacaacn ccaccaacct tatatctcct ggnntttagt gttggttaggt tttttaaaaa 180  
 aatggaat 188

<210> 4621  
 <211> 347  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4621

agcttcactt gcaatttcaa tataactaaat aaacaattac ctgcatcaga actataacta 60  
 gaaggtaacct cctgctgatg aactgatgga tttgtcggca agttcccttg ttcaaataaa 120  
 acagtcaaat ctctatgtc ggtcccatct ctagcactgt aagaatgcc atcttgagta 180  
 tatgatgtct ccaaactgac agatgcaggc tcttggaat gtcctgaaat ccgctgcaca 240  
 gatgcatcca agtaagaaaa ttgttgatag cttgctgatg gatgggattg gtntgaaca 300  
 tcaatataat gtgagtcaac agattgctga tactgatcat gataatg 347

<210> 4622  
 <211> 340  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4622

gctgaaacat gccccacaag tgtccctttt gccctctctt tgaatatttt gcacatttcc 60  
 ttccgaaatg tcacataacc ttacggattg cacagtaatt agtgtaagc agtcaattc 120  
 ggctggcgag attccaaatg ttggcagacg atcattcacg gacaaaatta gggatatgaga 180  
 ataccctacc catattgcag cgatgggtcat ccctagacat tagtcactca tagcacacaa 240  
 agctaataka aaactacgaa atgggtctaca ccacaaaatt gatgtaacaa atgtactgca 300  
 taacattctt cttttangtt agaaatagaa agcaatgcct 340

<210> 4623  
 <211> 208



<212> DNA  
<213> Glycine max

<400> 4623

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tcccagctac aatctcctgt actatcacac catgactaca gacatatgat ttcattgaga 120  
ctagcttact atgaatcata tcacatagag actagcttac tatgttccag ccaccctat 180  
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<210> 4624

<211> 374

<212> DNA

<213> Glycine max

<400> 4624

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tataaaaaaa aactagtaat cattgttttt aattcttttt atctttccat ataaaaaaat 180  
attttatcta agaaaactct taactaataa ttagtgattg gccctgcaaa cagcttttgt 240  
gataagacat taatgggtcac ctgaattaga agagatacac tctgctcaat attcttggac 300  
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<211> 326

<212> DNA

<213> Glycine max

<223> unsure at all n locations

<400> 4625

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atatcatata aatatgctga tagaaaaatt agcaaactcc ttcataaata tttttctatc 180  
tttataactc tactataatt gatagattta atatcacatg gctaacatcg gtatttcaaa 240  
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gattgtgaaa aaatcaatgt taacta

326

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<223> unsure at all n locations  
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attggccgta gtcaatcaac ttaaaaaaaa tggtgaaaat gttgatgagg tgaagggtcat 180  
ggaaaaatac ttcgaacttt aaatccaagt ttgacttca ttgtaccaac attgaaaaaa 240  
caaggattaa agaccatgac tattgagcaa ctcatgggtt cttacaagc atacgaagag 300  
naataaaaga gaaaaattaa acaaaatgag gctactgagc aactactaca actcaacgta 360  
agggagcaaa ctatgcaaat tacaag 386

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ccaaaaagaa ttgcgcaagg actaaccgcc tgaattcttg ttgggggtct cttctccttt 180  
tttcaaaaga acaaaggact aaccgctg 209

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<211> 276  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4628

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atatntttga ggcaaggaga accgtgtaat atccaatttc atataccatt tatttcatcc 180  
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 ttaaattttg agcttaatat gtggcatgca ttgtgaatca catttttaat ctttatcagc 180  
 taagttgagt tgtttatgta ttgtgtaagg cttttcaagg agaaacgaag caatgagctt 240  
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 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
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 tatgtatatt ggtatttcat tgatcctttg catgatatat ataatacatg tacaagaatg 180  
 ttctatacca aattctaagg catgacagac gtgatccata atcagtggca tctgatttat 240  
 tctatgcatt tataggtaaa taaata 266

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 <212> DNA  
 <213> Glycine max  
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 cggcgatagg ctcatcacca aatcgcggaag cgtcatgcgt tcgtagatat gcggaaaagg 180  
 aaagatatag aggagaatgt agagcgattt gaaagaaaaa aaataatact ttttcgtatt 240  
 ggaaatgaag ggtccaattt catcanagaa aaattccatg attaanagga gtaagganac 300  
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 <213> Glycine max

<400> 4632

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 gactcttgta aattatta 198

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 aattactaat tttnttcccc taatctaaag tttttttttt tatcanaacc taaaccttta 240  
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<223> unsure at all n locations

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cgcaaatecg cgtaataaaa ggaaacaaat agcttcaaaa aaaaaaaaaa gaaattagag 180

cttttgataa aaatgcatag gaagtgtgct tttgcacaat taaaaatata taatgcaatt 240

aatacgagtg atgatattac accacataga ggagcacttt tgtctttctc tgnntttaca 300

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gatac 364

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<211> 210

<212> DNA

<213> Glycine max

<400> 4635

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ctttactgta aagtgttttt ttactgccta caaagttatt taaaatgatt taacaactta 180

tgatagtatg tacctacttc ttataaagta 210

<210> 4636

<211> 330

<212> DNA

<213> Glycine max

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aaaaaaactt ttacaccaca cacactcatg aanttatttc tcataaatat ttataatgac 180

acagggttaat taattatgag gactggtaag ttactctaa aatgaaaccc attgaagtag 240

aaaaggagaa gatactcaaa gaaaagagat atatggtgat gtatgaaaaa gacaccgatt 300

ttagaaaatg aaaatgaaat cagatgagt 330

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 <213> Glycine max

<223> unsure at all n locations  
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 taaatgccat acatatatat gcattntgaa aagaacacac atttctatgc tcaaggcatt 240  
 gcgtcaaatt cacacctaata cacattctaa acacttgcta tcacgaacta cctacacata 300  
 tttgaaacat 310

<210> 4638  
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 <212> DNA  
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<223> unsure at all n locations  
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 ttacctgctg cgcttggttgc tgaactttga gggtcagcac ctcccgaaca caaagaggaa 180  
 gaaagagaag ataagttggt ttcgagggtta cagtgccttc agaggaagaa gacagccgaa 240  
 agaagagtaa ttcgctaatt tcattcatga ttgattcttg tattacatag gcatatatat 300  
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<223> unsure at all n locations  
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acaaggggtgg gtgcctcaag ccaatggtga aggtgggtgg caagtaaaag aaaattgtgt 180  
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 <223> unsure at all n locations  
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 cacaactttt gactaggatg tctgactgcg gccatcata taacgagacc ctengaaatg 180  
 attatggaag ctccgagcan attcaaattg tcataacttt tgaatcggat gtctgactac 240  
 agaccatact atatcgagaa actcgaaatg aaca 274

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 <213> Glycine max

<400> 4642

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 atgaaaataa aaaatgaata gccatttaa ttatttcagt ggatataaca ttttagaaat 240  
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 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
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 aaaaaaagtc ttgntcaaaa cctgtggaac caaatttcaa tacctgctcc tttgcaaaaa 240  
 acaaagacta ccccttgatt cttttgggca cttttcccta caaagagcaa aggctaccgc 300  
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374

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<210> 4650  
 <211> 355  
 <212> DNA  
 <213> Glycine max

1. *Chlorophyll a* (Chl a) and *Chlorophyll b* (Chl b) are the two main photosynthetic pigments in green plants. They are responsible for capturing light energy and converting it into chemical energy through the process of photosynthesis.

2. *Chlorophyll a* is the primary photosynthetic pigment, and it is found in all green plants. It is a green pigment that absorbs light most effectively in the blue-violet and red-orange regions of the visible spectrum.

3. *Chlorophyll b* is a secondary photosynthetic pigment, and it is found in some green plants. It is a yellow-green pigment that absorbs light most effectively in the blue and orange-red regions of the visible spectrum.

4. The presence of *Chlorophyll a* and *Chlorophyll b* in a plant indicates that the plant is capable of photosynthesis. The ratio of *Chlorophyll a* to *Chlorophyll b* can be used to determine the health and growth of a plant.

5. The concentration of *Chlorophyll a* and *Chlorophyll b* in a plant can be measured using a spectrophotometer. This instrument measures the absorbance of light at different wavelengths, which can be used to calculate the concentration of the pigments.

6. The concentration of *Chlorophyll a* and *Chlorophyll b* in a plant can also be measured using a colorimetric method. This method involves measuring the color of a plant extract, which can be used to determine the concentration of the pigments.

7. The concentration of *Chlorophyll a* and *Chlorophyll b* in a plant can be used to determine the health and growth of the plant. A high concentration of *Chlorophyll a* indicates that the plant is healthy and growing well. A low concentration of *Chlorophyll a* indicates that the plant is stressed or diseased.

8. The concentration of *Chlorophyll a* and *Chlorophyll b* in a plant can also be used to determine the age of the plant. Young plants have a high concentration of *Chlorophyll a*, while older plants have a lower concentration.

9. The concentration of *Chlorophyll a* and *Chlorophyll b* in a plant can be used to determine the environmental conditions that the plant is growing in. Plants growing in high light conditions have a higher concentration of *Chlorophyll a* than plants growing in low light conditions.

10. The concentration of *Chlorophyll a* and *Chlorophyll b* in a plant can be used to determine the nutrient status of the plant. Plants that are deficient in nitrogen or phosphorus have a lower concentration of *Chlorophyll a* than plants that are not deficient.

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<212>	DNA
<213>	Glycine max

<210>	4652
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<212>	DNA
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aaaacccata ttaattatat taattaata                                     149

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<210>	4653
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 <212> DNA  
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<400> 4656

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ctcgtcactg ttaacttatac ggtgtaccat actattatat acataattat aattatgcac 180  
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 tacatgcgta ctgtatcaaa aattatTTTT caatgactat tctaaaacaa ttgttatatt 300  
 ttntaataac atgggtcatga aatgctgaat attattataa gaataagcgt aaaaacacca 360  
 aaat 364

<210> 4659  
 <211> 325  
 <212> DNA  
 <213> Glycine max

<400> 4659

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 ccaaggggct tcggtttcgt cgtttttgca gatcctaaca ttctagatag ggttttggaa 180  
 gacaaacatg tcatagatgg cagaaccgga acgcttctat catttttttt gtcatttctt 240  
 tacttcatgt tccgattgaa aatattgtat tgtacttttt agcgtgattg gtgctgggtc 300  
 tgaattgggg ataatcttga aaccc 325

<210> 4660  
 <211> 449  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4660

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 acatcccaca ttatttccat gatacacatg caacaataat gattaggaaa ttttatgcaa 120  
 aactgggtcat gcatgcacct atgtggacac tcaagcatca aacttttatg gtcaagtgat 180  
 gctagggatc atgattcatt ttctctactt tagtcaaccc ggtgtttcca aaatatgttc 240  
 ttttatcaat ttgtgcattc atccgagtct attttgggtg ttcgaaaaaa ctttcacagc 300  
 atttaccctt caaatgtata cacatttntt ttcaaaaact gggtatgatc agtgaattct 360  
 ttcaaagaaa agctggaaat tatctctttt cacaagcatg tcgttttaag ctagacaact 420  
 ttttatcttt attattttcc tttntttct 449

<210> 4661  
 <211> 452  
 <212> DNA  
 <213> Glycine max

<400> 4661

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 gcacgaaatt gaaggaagaa aaaggagag aagttgaact ttgagttgtg tctcacaaga 120  
 ctctcattca tcaaagttac cacaagtgtt acatatgctt ctatttatag actaggtagc 180  
 ttcccttgaga agctttcttg agaaaacttc cttgagaagc ttctttgaga aaacttcctt 240  
 gagaagctag agcttagcta cacacacccc tctcataatt aagctcacct ccttgagaag 300  
 ctcccttaag aagattccta aagaagctag agcttagcta cacatacctc tctaatagct 360  
 aagctcgctt ccttgagatg agaagctaga acttaactac acaccacctt taatagctaa 420  
 gctcaccccc atgacaaaaa aacatgaaaa ta 452

<210> 4662  
 <211> 392  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4662

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 aaagcatttg caacacaaaa catgaagggt tgaaatgtta ggtttttttt atcattaaac 120  
 agttcatata gagttttctt taaaatgggt cttattaaag ccctattcat gatatagcat 180  
 gcagtattaa cggcttcagc ccaaaaatat nttggaagag gagtgtcatt taataagggt 240  
 ctagcaatat cttccaaaga tctattnttt cttttcaaca actccatttg ttgagggggt 300  
 ctagggtgcaa aaaagttatg ttcaatgcca tgcttatcac anaataattc aaatttttta 360  
 ttttcaaatt caccacctat atcgctccta at 392

<210> 4663  
 <211> 393  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4663

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 agattgccga attttcaa at ttgataaa at attcaggatt tcttgaaatg catttgccat 120  
 ggaggtgaat cagatagtga gttttctcat agaataact ttgcttaa at gaactgtcga 180  
 gagagaaaca atcatgaggc atttaccgaa ctgtatgtac attgtaca at cacaatata 240  
 attaacctaa taataaatac atggatcatt acttncctaa ttatatgaac ttactaactt 300  
 atataccatg aatttgacc tacataatta tatgtagnta tgtacaaaga acctggacac 360  
 aaatgtaaat tataaggtca attacatata caa 393

<210> 4664  
 <211> 296  
 <212> DNA  
 <213> Glycine max

<400> 4664  
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 gatcttcgtt ccttatagaa cgtaataa at atttcaat at gtgtgggttt gtcgagcatg 120  
 attgtgttca aggtactatg tagggcaact atattatcac acaggtcaat tcagcatctg 180  
 cacaatgtga atctttgaac aactatctta accagactag cttatatgta ggtagtgagc 240  
 tgtccaagtg agccaatttg gctcatccag gttagctaaa atgtgagttg aagcca 296

<210> 4665  
 <211> 480  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4665

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 ctttttcccn cgcgcgacc atgtaggatt ctaccgagac gctattatcg atgggctcct 120  
 gccaccttaa tgactactga ggccgcccga gagccttggg aacgagatac ctgctctatg 180  
 ctccctgtta catctggaga tggcggacca ccatgtctac cctggccgaa cagagaccgc 240  
 catatcaccg gtctcaccga caccgtaat agaagctgtg acctgtgagg aagatatgga 300





gtattattgg tataattggc ctgttcatt atgcttttaa tgtctataga ggctacttcc 60  
 tcgttgacat cttttgtctt gaattgaatt gccatgacag gtttattgtt actgtctttg 120  
 atattcggca gttgatattg tgttgcgga ggcaattccg attggattaa ctcaccatcc 180  
 ttcacttgcc aatntgttat gacatattgt cgttgaatca cctatgatgt cttgattcca 240  
 agggtaatct atatcctttc tgatggcata agcatgaaac caatcaaaga aaaggacatt 300  
 ctttttgact cttttgacaa att 323

<210> 4669  
 <211> 484  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4669

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 ctgctatgaa cagatatata atgacatcct tactaaccac acatgagcga cgaagccggc 120  
 tactgggtga gacgctgagt gaacattatg gagcaccatt gcttatcaca gatgacttat 180  
 aactgggacc ccatcatgaa caagatcctg cagagcatgt gccatataaa gggcgatgta 240  
 ccatcaatca atggggacat gtaggtctat ctcttatgat gtatcgcaaa ccaagtggga 300  
 tatatatgcg cctctcgaca tcgaccacgc gtaattgatt gactgagctg cctgggttaca 360  
 ggaacatcca gacaccggaa ccagttgctt cgataggggtg atatccattt gcctccgatg 420  
 atgctgcaga aagcactatt tcttctacat taacagttat agtaccctgt gagttgaccg 480  
 agcg 484

<210> 4670  
 <211> 404  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4670

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 cacagtctca tggctcttcc tggactatat gctgtataga ttgggctttt gtcataaatg 120  
 gagaaagtgg atctcagctt gtcttcactc agcaaccatc tctatcctta ttaatggcag 180

ccctacaaag gagtttaccc catctagagg cttgaggcaa ggggatcccc tagccctct 240  
 actctttaac atagttgggg aaggcatctc aggcctaagc aggggaagcag ttaggaagaa 300  
 tctatatagc agctacaggg ttggtatgaa ttatgagccc acaaattatc tgcagtatgc 360  
 agatgatact gtttttgtgg gtgaggcttc ttngnaaaat gtct 404

<210> 4671  
 <211> 437  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4671

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 cctcttcctt ctctgccttc tgcttataat acaacaagca tactgccaca ataaatagca 120  
 gactcagagg tgctcgaagc gcaatgcagt atgttacaaa caaaagcatt gttgatgaat 180  
 atattggatg acggacccaa cgataaggtc caaattgcac tacagaagtt ggctccacca 240  
 cattttctga atacttagcg agatacaatg tagcattata ctgcattagc agagttgtaa 300  
 tgattaaagc ccagattcca agattgctcc acccaccgg tatgagggtga agctcangcc 360  
 cttcaaagtc tgcaagccaa tggccaacca tgactcctgt gctgaacaat aggcgagacc 420  
 acattggcaa gttcacg 437

<210> 4672  
 <211> 286  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4672

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 tttacccgac gaagacactg acaaaaactt atcttcttct ttgtggacaa agtatggtaa 120  
 gctgggggca acgaaatctt cttcccatca aaccttggat gcaaatgtga tcgtatgccc 180  
 atatcagcta gaacttgacg ggtattcaag ccacctctcg tctcgcttg aatgttaagg 240  
 agccgcccac tcacactgtc gcacactatt ttcttcacat gcataa 286

<210> 4673  
 <211> 191  
 <212> DNA  
 <213> Glycine max

<400> 4673

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 tccttaacaa ccactggcgt ttgaccacta gtggtggcca ttggagagga atttcgccag 120  
 gggcattttt gtgatacttc atccgaaaac ccagacaccc actccccaca cgaaaattca 180  
 tctaagacca t 191

<210> 4674  
 <211> 524  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4674

ccctgcaccg cacnngacca taangngaca cgcgccaccac tataccaggg gccnnnnnnn 60  
 tagtgactcg agaccanna cggaanaaga cannagcnaa gaaagaaaag agaacagaag 120  
 ttctgtcatg acaagagacg aaacaccccg acaacgcaaa gcaactaccg gcgccggcac 180  
 cgggctctca acgtccaccc aagaacaaaa agagcaagaa ccagggaaca tcatacgaga 240  
 acgacaacaa aaacccaaag gcgaacatt tctgcacacc ccaccacaag atgtgatctc 300  
 ttacagcccg aacaataatg caccagctag cacacgccgc aacaccgtga gagctggaga 360  
 agaaacagaa aaactacacc gcagtcaagc acggtaaaaa gcaaccacgg ggaccaacaa 420  
 atgcgaaaaa caaaagacct tgaagagggc actgcagaaa agagacaaca agattcctgg 480  
 gggctgacct tggcataaca caacacacga ggcgccacgt cgcc 524

<210> 4675  
 <211> 446  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4675

ggaagatggt gctntaatgg aggaaaagaa agaggagag tattattaga tgggggagca 60  
 caaaattgaa ggaaaaaaag ggagagaagt tgaactttga gttatgtctc acaagactct 120

[illegible]

<400> 4676

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<210>      4677
<211>      513
<212>      DNA
<213>      Glycine max

<223>      unsure at all n locations
<400>      4677
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 tgagagaaaa atgtccaacc cttgtgggtc aataaaatgc atgacattat gtcatgggag 420  
 cctgggagag tctggtggat tgccttctga caagagtcaa tgactgctta taagttgaaa 480  
 tgcttgtcac atggcaatgt agtgactatt tct 513

<210> 4678  
 <211> 440  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4678

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 acaacctata ataacacaaa ctaatcaagt ggaaaagtgc gttttaatgg cataagataa 120  
 caaactaacc gacaaagcaa aaagcagtta aaaattttta gcaagcttta gctctaataa 180  
 tcttcttttt agntggacta tatgaagtcg atcgcaaact nttctcataa tctttgccat 240  
 tagtacggca tacatacaag ttatacataa gctatatgct gtaaacccca cttgtaatgt 300  
 cggcatgcaa attatttaac tccggaataa accatttcat tagtactaat tacttaagca 360  
 cctaacattt ggtatagatc acattgatat tctccttagt attgggttgaa ctaagtagaa 420  
 ttattataag acacaaaatc 440

<210> 4679  
 <211> 410  
 <212> DNA  
 <213> Glycine max

<400> 4679

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 gagtaggagg taaaacttgc aatgatgtca actaatgttg ctatggcact gacatgccaa 120  
 tttccatttt catcctatag acataaaagc atagaatctg catgataagg gaagataaat 180  
 gcttgaagta aaaggagaat cacattatta tcaatctatt accaacaagc cactgtgtat 240  
 gatcaagtca caaaggatga aacctttgtg tgcctttact atccggataa cccttagggt 300  
 ggaaagaaac tcttgaccat aagttccatc tgacaggcct tttatccatg tccggatcac 360  
 ttctagactg ggatctttca tctctatctc aaccatgccc acaaaccaga 410

<210> 4680  
 <211> 434  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4680

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 ttatgcgctt gaatcggacc tccgagtga aagttaagac catttgaatt gctcaagagc 120  
 ttccattaac caatttcgag ggtctcgata ttttatgttc ctaaatacaga cctccgagtt 180  
 aaaagttatg tccatttgaa tatctcgaga gcttccgttg ttttaatttcg agcgtctcta 240  
 tatgtgatgc tcttgaatcg gacctccgag tgaaaagtta tgaccatttg aatatctcga 300  
 gagcatccgt tgttcaattt cgagcgtttc tatatgtgat gcgcttgaat cggacctccg 360  
 agttaaaagt aatgaccatt tgattttctt aagagcttcc gctgttcaca ttcgggcgctc 420  
 ttgatatttt atgc 434

<210> 4681  
 <211> 441  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4681

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 tgaacaacgg aagctctcga tatattcaaa tggtcataac tnttaacttg gaggtccgat 120  
 tcacgcacat aatatatcga gacgcccgat attcaacaac ggaagcactt gagaaaatca 180  
 aatggtcatt acttttaact cggaggtccg attcangcgc atcacatata gagacgctcg 240  
 aaattgaaca acggaagctc tcgagatatt caaatggcca taactcttaa ctccggaggtc 300  
 cgattcatga gcataatata tcgagacgct ccgaattgaa acacggaagc tcttgagata 360  
 ttcaaattgg cataactttt cactcggagg tctgattcaa gtgcataaca catcgagacg 420  
 cttgaaatta acaacagaag c 441

<210> 4682  
 <211> 337

<212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4682  
  
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 gcaacccaaa ggcaccaca acaggcaaca agtcagccac catttggtat cacaccaggc 120  
 tgatgcctag gttgccatt gggcccttaa tacaacttga actagaccta actaaagccc 180  
 ttttagtnga gtaacccaaa acatatttat ggtcaaccaa ctttacgagg attgtgccat 240  
 tatttagaca aactaaatac tttataattg aaacaaagcg gagagattta gacctectcc 300  
 attgcgccat gatacaactc acacacttgg acttttcc 337

<210> 4683  
 <211> 285  
 <212> DNA  
 <213> Glycine max  
  
 <400> 4683  
  
 agactagatc gtggatattc gcgttctgct ctgttctagg atcaaggctt ctatatatgg 60  
 agaaccagct tgtcacacct gcatatgtat gagtctcgct agtttcttca tgttttaaaa 120  
 tgagttatgt atatgggttat gtatctacaa ctgaaagtga tggcaaacct tctcttgttt 180  
 gagattgtct tgtgtctaaa agcaatcaac taacagatta tatctaactc acaatgaata 240  
 gtgttttctt ctctaagcct tcataccaca ttgtatcaag tacat 285

<210> 4684  
 <211> 421  
 <212> DNA  
 <213> Glycine max  
  
 <223> unsure at all n locations  
 <400> 4684  
  
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 tgaagcgtcg gagacaaact gacattttat atatgactcc actttaatca tttttttatt 120  
 atctatctag acacttaaca tcaatgtctg gtttgaatc tcttttgtct atatcaaaca 180  
 atctcgatct tttttcattc ctcatatact ttcatctcta ttcatgcata tcagccaaac 240  
 acaccttaag gagaaccagc tcttcaacgc tctactcag tgagaggtat atctatcct 300



ttctttattc tccatcatcc ggcgattaag tgagaagcaa ttctacattg ggcttttgtc 360  
 ctcaaattgt ggcacaaaaa gtatgatagt tggatatacat gcacttcgat gtctcacact 420  
 c 421

<210> 4685  
 <211> 416  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4685

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 ggcactggaa ctaagaaatt tcacagtaca tatgcaaaaa ttgaaaaaca agtgggaagaa 120  
 gaacgcaccg agatagatct cctagaaaga tccgctactg attttctgaa aaatcagaat 180  
 gtcctttctt acctcctccg cgacgaagtc caattggcca ccacaaagac ggtgctctcg 240  
 tcgggggctt cgggtgtcac caccgcaatg gtgggtccact ctggggcgag caacctcctt 300  
 ccttcgaagc tccggtccta catcaccaat ggcattccaca acatgttctt gtgcttctcc 360  
 tcggagataa ccctaattatt gatgagttcg acgggtctcg caacaactaa atctac 416

<210> 4686  
 <211> 175  
 <212> DNA  
 <213> Glycine max

<400> 4686

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 gtttcccttt ccttgttttg aagctcacta caagccttaa gtgaaaaacc atgatattac 120  
 catatcctta aggaattttg gagcttttga attgttttgg gaataagtgt gggggg 175

<210> 4687  
 <211> 457  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4687

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gacattgttg gtgtgacacc aactggataa cattttcaac tgcatttgcc tatttgagg 120  
gagaacatat aagcaatgtt gtttgggctc tggaacggtt tcaaagtatt tttctaagat 180  
gtgatgcaat ccctcaagtt actgttaccg atagagattc agcattgata aatgcaatga 240  
aaactgtttt ccttgaggca acaaacttgt tgtgttggtt tcacattgat acgaatatga 300  
aggaaaaatg taaaaccctt gtgggtcaaa aaaatgcatg agattatgtc atggaagcat 360  
gggagagtct ggtggattgt ccttctgagc aagagttcaa tgactggctt atgaagtttg 420  
aaattgcttg ctcaccatgg tcaatgtttg ttgacta 457

<210> 4688  
<211> 183  
<212> DNA  
<213> Glycine max

<400> 4688  
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tctaaagaag gagctgaatg ctttggaggc tggatatctc gacagaattc tgaatcaatt 120  
tgaagcggag ctcaagaagt ctcttcagga gcaatcgtgg cacgctcgct atgcctatga 180  
atg 183

<210> 4689  
<211> 415  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4689

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cactacgtta agcccaacat cttcattgga agtaaacttc aagcagtggg cttagcagac 120  
atgatccgct aagcaccact tcttctctgg aaaagcttat tatagcagtg ctaagcgcgt 180  
tgtcctgagc taagccccag atccattctg gaattgaact ttcatacttg ggcttagtgc 240  
ggcaggatgc gctaagcgcc aatccttcat tgtgntttga attcttggaa gtgtgcttag 300  
tgcacctgtt gactaagcc taaactactc tctgcaagtc gaagcttgat tgcgcgtaag 360  
cctcacctct atgctaagcg cctattcaga aatttcgcgt cgcataagcg ctata 415

<210> 4690  
 <211> 281  
 <212> DNA  
 <213> Glycine max

<400> 4690

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 gaccactgtg agaagtaaatt tctcatgctg agaacagtca acacatctaa gctggaacat 120  
 ctataaaact ataagcattt aagcatgttc aggctataga ttcccaattc agggatgtca 180  
 cctaacatga gtgaactgaa attacaggag cgtgctgctt atataattct gaagctgtta 240  
 cagggggaag catagctcac acgagaatgc ttttccctgt t 281

<210> 4691  
 <211> 448  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4691

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 ggtagccat aactcgctg tgctatntct tccatgccat atatagcana gtcgttgatc 120  
 ctgtcaagta tgatgagctg gaaaatgagg ccgaaattat actatgccag ttggagatgt 180  
 atttttcccc tgctttcttt gacatcatga ttcacttgat tatggatctg gtcagagaaa 240  
 tcaaagtgtg tgggcctggt tatttgtggt ggatgtaccc ggtagagcaa tacatgaaga 300  
 tcttaaaagg gtatacaaag aatccttctc atctagaagc atctattggt gagaggtaca 360  
 ttgcaaaaga agtgattgaa tcttggttcag aattcattga gaaggctaaa cctattggcc 420  
 ttctgagtc tcgcatgat gacagaac 448

<210> 4692  
 <211> 300  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4692

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ttgataattc aatggtagcc ataaccctag ccaaggttca tcaacctcca tttctccgag 120  
aatacgactc gaacgcaatg tgtgcttggt acggagaagc cccggggcgt tccattgagc 180  
attgtacggc tctgaagtgt aggggtgcgag gtctaattga tgctggctga aatttgagga 240  
gaatcgtgtg taaatcctga cattgacaag agatgccaca catggtgcaa ttttgaaagc 300

<210> 4693  
<211> 468  
<212> DNA  
<213> Glycine max  
<223> unsure at all n locations  
<400> 4693

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gtgaaaaaag cttatatctt tgggttaacac acttttcgac ccctttctaa tatgatcttt 180  
gatatttcaa aagtgtacta gtcttcttcg tatattggct tatgactcac ctgctgatag 240  
tgtggacatg tatattcaga ttactaaaag cactgtagtg gaatgcttac aaaaaattgt 300  
atcaaacatg tgtgcaatat ttggggatga gtaccgagg aggcacaaata ataaagacac 360  
atgaagacta caaattgaag cagtacatgg ttntctaggt atgttagggg tcattgattg 420  
tatgcaatgg gaatagaaaa aaaatgtcca gttgcgtgga aaggctca 468

<210> 4694  
<211> 433  
<212> DNA  
<213> Glycine max  
<400> 4694

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attaacaata gcagctcata acacacacta ttttttggtt acaggacaaa acatcttcta 120  
tttatgcata attaattgaa ttaacctata taaacacaca tctattgtat attcaaacac 180  
acatttgatga atcatgcagg ttttgatgat gtcgaaaaga attcacttga taacgattgt 240  
catcatcaaa aaggagaga atgtgaacac ctagagtgcg aatgtatgaa tacatgattt 300  
tgatgatgcc aaagaataat caaacaaggt tactttcaag attacttcaa caaacattca 360  
aaggtaagc attgcttcaa gattaatata aggttgcttc aacaaacaag cattgcttta 420

agattaattc aag

433

<210> 4695  
<211> 440  
<212> DNA  
<213> Glycine max  
  
<400> 4695

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aagattagac aatgtaaatt cacactgtgt ggatttacac taagtataat taatgtggat 120  
cactctaata tctatgtaat tagcaccatt gtctacgtta attagctagt ttacttctt 180  
ttggtgaaaa aagttgcctt ttatgcctaa tcttatctta ataatttata acaatattta 240  
caaaaaggaa actacaaaaa aatggctagg gctctcacc aactgcacct tctctctctc 300  
tccatcaact tttttcttta atcaagtgtt tgggtgacatg aggtagctta agaccaatg 360  
tgcattggga acccttgaac ctatagctat cctagacttc ataaacactc caagttcact 420  
ccactttgtg ccttgctatt 440

<210> 4696  
<211> 239  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4696

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cgagtattga tgttggagtc ctcagcaaca aaatggatca attataatac acccacatgg 180  
ttaatgaaat aaatcatttg tgatattatt aattcggatt aattatgtac ctgtctctt 239

<210> 4697  
<211> 567  
<212> DNA  
<213> Glycine max  
  
<223> unsure at all n locations  
<400> 4697

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gnnnnnnnnn nntttctggc atgagaacgt ccacanccaa acnnnagcnn agnnnaagnn 120  
 annaacaggg agaagaaaac cggccacatg tattacgcat ctatnaccgc aaaagaagga 180  
 ggctaaagaa cgtcctatgc tcgcacggac aagttagacg acgatgagca agcaaatttt 240  
 acatgctcgc tgaggaaact ggaagacgat actgatccgc aacaaacgtt actggtcaac 300  
 tcgaataaaa atgtgcaagt caaaagaacc ccgagtcgcg aagagcactg gatggccaac 360  
 ttgaaccaat tacacaaatg acatcggaag tggttgtcac taagactcaa tcagagattc 420  
 cactagtcac cgctggaaga acaggatggt cctcacaaaa aggcgaaaca tcgacgagca 480  
 tatatactca taaaacaaat gtatgccaag ccacctacaa aaagactcac ccatcagcta 540  
 aacacctgaa tgaccgctg aaagccg 567

<210> 4698  
 <211> 434  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4698

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 tctgatcatc atactttgat aaatgccaaa aaaaactagg gcaaatgaag agggtgagaa 120  
 tgagggacaa gccatgctg tgactgccat tcctatacag ccaagtttcc caccaaccca 180  
 acaatgtcat tactcagcca ataaccgacc ttctccttac ccaccgcca gttatccaca 240  
 aaggccatcc ctaaaacaac caciaagtct gggtaccgca ctttcaatga cgaacatcac 300  
 ctttagcaca atccaaaaac accaaccaag atatgaattt tgcagcgaga aagccttaga 360  
 attcaccca attccagtgt cctatgctga cttgctccat atctacttga taattcaatg 420  
 gtagccataa ccct 434

<210> 4699  
 <211> 469  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4699

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1000  
 900  
 800  
 700  
 600  
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 400  
 300  
 200  
 100  
 0

nattgagcgc	ttggacttcg	nngcnctcta	gagtcgagct	gcnaggcatg	caagcttgga	60
aggtagtcat	aacctcacia	aagatatata	tacttataca	tatatatata	tatatataga	120
tatacatata	catatatata	tatatatata	tatacatata	tatgtctggg	gagaacgatc	180
ccttgगतat	gcgtgtatgt	tgacacaaaa	atttgacaac	atatgtatat	gtgtgattag	240
gcagcaccat	accttgगतc	tgctgtgat	tagataaata	tttctcagaa	catatatata	300
catgcttagg	ttgaagaact	ctctgtggca	cacatgtata	tagcacataa	cctcacaaaa	360
attcacgtgt	gctcatgtag	catacacctt	cttgtatcac	ccgagagcgc	tctagactag	420
attactacgc	aatacacttt	cgaacgagac	tatctcctca	atccatagcc	gtactcatgc	480
gccgctcatc	tcacatcca	ttttcccaga	tcgcactcc			519

cttccttttag tgcgtcacgt ttaaaaccga gctcgatggt gtttgttatc cttgatggta 60  
ctcggcgggga agagatggga gatatcgaca ttccattca gataggcccc cacacttgca 120

atgaggtggt tgacgtaatg gatataaatg cgcctatag ctgactcttg ggaagacctt 180  
 ggattcatgc cctgcgagtg ggcccttcaa cgcttcacca gaaagtgaag ttcgcagagg 240  
 gtagactttt agtgatagtg tctggtgaag aggatatgat agtgagtagc cctcctccg 300  
 caccgtacat agaagcggcg gaagaatcat tggaaacggc tttccaatcc tataaagtgg 360  
 agagctgcgc ctcggtggaa ccaagtagct cgctactttc tctctccaac gtggacataa 420  
 tgggtggcgcg tgttatgc 438

<210> 4702  
 <211> 224  
 <212> DNA  
 <213> Glycine max

<400> 4702

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 agagagcaag aatgaagag ccaatggttg atacatggac ggagatgaaa aagatcatga 120  
 ggaagcggta tgtgccggct agttactcaa gggacttgaa attcaagctc caaaaactaa 180  
 cccaaggcaa caaggggggtt gaggagtatt tcaaggaaat ggat 224

<210> 4703  
 <211> 459  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4703

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 ataacttttc acccgatgt cggattatgg cgaatcacat atcgagacgc tcaaaattgg 120  
 acaacggaag ctcttgagaa attctaattg tcataacttt taactcggat gtccgattca 180  
 cgcgcatcac atatagaggc gctcgaaaag gaacaacgga agctctcgag aaattcaaat 240  
 ggtcataact ttncacactg aggtccgatt cacgattata atatatcaag acgctcgaaa 300  
 ttgaacatcg aaagctctca agaaattcaa ttggtcatca cttttcacac ggatgtccga 360  
 ttcggcgcac atatgtcgaa cgcttgaaat gaacaacgga agctcttgga aattaaatgg 420  
 tttaactttc acacggatgt caattcaacg catacatat 459



<210> 4704  
 <211> 399  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4704

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 ggatagatgt caaaaatttc aacattacat taaaacatgg gtgaaggaat cacaacgaga 120  
 agcatactta ggagcttact tgaatcaata tgtaaaatat aactagtacg ttcaaaaaaa 180  
 tatttgcatt atacgtacct aattatagtt ctggacttta gggcacaatg gaagcttggt 240  
 gttgtgtgtc catgggacaa tactattggt tggttttggt ctttgcgtaa gaagcctgat 300  
 gttaacatca aagctacaat taacagggtta tgtttaaaat tataattcat ttattgtata 360  
 acaatcgtag gatatgtaaa cacgaatttg atgctatat 399

<210> 4705  
 <211> 473  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4705

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 ctataactag gcatgatcgg ctgcaggaaa agtccagaac ctgaaatcaa caagatttga 120  
 gagaaattag tgagaagaag gagaaagacg aagaacaatc aaggttgaga cgcttccgta 180  
 acatttccgt aacgttgctg tgatcgttct tcgtccattc ttcacgttc atcattcatc 240  
 gatcggttag ttnttatttt tgaagctttg aatttattct atgcgccctt aggtgatgga 300  
 agcttgcttg tggcgcttct atggaggcta gatctttgag cttcaatggg gtcctttaat 360  
 ggtgatntc caccatggag atgtagcgta agacaaagga gaagaggtga gaggaggcgc 420  
 cattcactat ggaataagcc atggaagaag gagcttcacc accaagatga gcc 473

<210> 4706  
 <211> 280  
 <212> DNA  
 <213> Glycine max

<400> 4706

agcttcatga cgaagaaaca agttgtttca attattttct gacgacgaca aggatgatga 60  
 ctcatagccc aaagaatgat ttcaagatta agtccacaag atcaagatca agattaattt 120  
 ccagtctcat acgacgacat ccatacgaat ccagactcat gagacgcttg atttccagat 180  
 tcatgagacg atgaattccc gatttatgag atgaaaccac gacgacttca cacggggagt 240  
 attgcaaaga tttttcaaac aacatacata gcacactttt 280

<210> 4707  
 <211> 430  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4707

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 cctacaagct aagaccaggt agaatgagat caactgtata ggctcanggt acaatcaaac 120  
 gatcatactt ccacctcaga atggcagcca gggatatatc aatcatgcac aatgtaagct 180  
 attagctaag tggctatctt caatacaaac atggccttca tcatctccaa tttcacacat 240  
 tcattccata ctcatatatt catgcataaa tcattactca atgttaggca ttctctcaca 300  
 attaaagatc acactttcac cgggttgagg ctaatgcgtt ctttcacaat caactcgaca 360  
 aaccaactaa cattcttagt catgatccta agtcaatgtg ctttctcttc taacgactgc 420  
 atgctcattc 430

<210> 4708  
 <211> 217  
 <212> DNA  
 <213> Glycine max

<400> 4708

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 aagtgatact ctgatacatg ccatcaaaaa atatggtagg atgattacgt cgataatgat 120  
 ggacaagacg aagatgtgac tgccattcct atgcagacaa gattgccacc aacctcccca 180  
 tgtcattact gagccaaata cccacccttt ccttaac 217

<210> 4709

<211> 338  
 <212> DNA  
 <213> Glycine max

<400> 4709

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 aatccctcac tccttgggtt ttctattttc ccaccattct tcaattcttc aaatgcagta 180  
 tgtccctcag aatttttctca tgcaccatcc aactctgtaa tacaagtctg cacttcatgt 240  
 tcctcctctt tagttcttct aggtgcgacg gtgactccga acgactggca gaatcctgtg 300  
 atcaaagcgg gaaataccag ggcctattg gacttata 338

<210> 4710  
 <211> 396  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4710

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 atganaactt actanattag attaggtgct cgggctagat tactgggtgga ttcactttat 120  
 acaaagaatg attaactcgc ttaggtaact tgtaaccaat tgcaagtacg gaaaatgaaa 180  
 tacacctaata aacgaacctg taaatgacta gcaacattct cttttgtcaa acctgngaca 240  
 ttcattctctt caagaattct ctttggcaca acctctaaaa aataatttag gcagaaaatt 300  
 gtaagtgata gatcataact tacatatatg tatgcgtcca tatattcttg aattgatgct 360  
 catgcaaagg ttcaattcaa anacacacc gcccaa 396

<210> 4711  
 <211> 451  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4711

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 ctgactatga aacagtatat agaattgatt ccttactaat ccanaagga aagaggaagt 120

tggctacttg gtggttcact gaatgaactt catggagcac aatgtttttc aaagatgatt 180  
 tatatcttga gttccatctt taatagatct gttgtgcatg tgtcatataa ggtttgatgt 240  
 agtatctttc aatgtagtct tttagttnta tctcttctaa tgttntgcaa aagaagtgg 300  
 ctattatgtg tatctgttat ttgagcacgt tcaattcatt gactgagttg cctggtttaca 360  
 ggaacatcca gaaaccggaa ccagttgctt cgataggggg aaatcctttt gcataggatt 420  
 atgctgtaga atgtactatt ccttttcaca t 451

<210> 4712  
 <211> 214  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4712

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 agcaatagca tcatttcttg cactgagttg ttggaatcg gaaaccatct tctcaatcaa 120  
 attcctagct tcagcacggg tcatagtacc aagagctcca ccacggcag catcaatcat 180  
 actcctctgc atgttgctaa gtcctcata gaaa 214

<210> 4713  
 <211> 576  
 <212> DNA  
 <213> Glycine max  
 <223> unsure at all n locations  
 <400> 4713

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 nnannaaccg cgcngcanan nnnnnnnnnn nttggatgac ctgagacctc cggnaccaa 120  
 acaacgcacg acagagacga ggacgcgncc aaggagagaaa cacacagccc ttattcaatg 180  
 tttacagacn ggcacctgca gacagggcgc ggaggacacg agaccacgga cagcacacgc 240  
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 cagagagaac cggagacgca ccaaacagg cgagcaccgg gcagcaacag atcaaaggaa 360  
 caaagaccgc aaagcacgga ggcacggagg gcagaccagc ggcgaaacct gtggacacac 420  
 gcgacaccga caccggaag cccaacaca ggcacgcgat cgacaccccg cccagaggcc 480

aaccggcgca caacggcccc cgccgaaccg acaccggggc gccccgaaga ccaacggcag 540  
accctaccac ggcgcaaccc cgaccacgcc gcgagc 576

<210> 4714  
<211> 405  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4714

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cgacttttgc aaatcagacc atatattttg ttactagctt acttgaagta cctgtatact 120  
taactcagac ctgcaaaaaa tactcggttc tacgagctta aacatacatc ccggcactaa 180  
ggcacaatgg aagcttggtg atgagagtcc atggcacaag gcctacgcac tgatctgtgc 240  
ctagacacac acccatctca cagtctttac actcaacacc ccggctaate ctctccgac 300  
ccctcgtcac cgctggacga gctaaatctt actggacgct ctagtcttac ctacttttg 360  
ctgttgacta gcacttatgc cagaccccaa tgactacctt ccccc 405

<210> 4715  
<211> 438  
<212> DNA  
<213> Glycine max

<223> unsure at all n locations  
<400> 4715

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agaagaagga tcaaaggcca acgaaaatga cagggaggga agaagaatag cagcggcgca 120  
aatggaagct tagcttgctt gtgtacgtat aacatgaaat gttgatgggt gcacccaaat 180  
cttttaaatt aagggcaggg gtatttttga cttttcacat taaatggtgg gtgcacctag 240  
catcaccctc atagaaagcc taagtgtgaa aaggagaatt gtatgggtca taaacccttc 300  
cctaaccatc acaattcata ttgtcatttg caaagggact ctctcttttc tttttcttct 360  
ccaagagaga ctcaaatcct ataagcttga ggtatgggtg tggtaatcaa aggagatcat 420  
nttcctcttc ctttgatg 438

<210> 4716





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 cccacttgt ggtgattgat gtacgtggtg attgagttat ttattggatt cttgcttcca 240  
 tttgggaccg tgttgctcat catcacaggt acaaatgttt gttaccgatt aattttttta 300  
 ttacttgttc actgccatta aagacaacta atatttgata tacaaatttt gttcatgatg 360  
 agagaacctt agattcccgt ttgagactga atgcaatgat tcttgcagac agtttgcatt 420  
 aatcaatgta ttcaatcctt 439

<210> 4722  
 <211> 262  
 <212> DNA  
 <213> Glycine max

<400> 4722

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 aaatacatgt atatctatctt aatgatgttt tatgtgttct ctgtgctatc agtacatcat 120  
 ttcagtgtgt ttctaccttg atcacgtaga tgcattgcttt gttaggatca ttcaatgggtg 180  
 gaaactggtc tgattcttag aacttgatag gatagggcta gtttatcgta ttatcacgag 240  
 ggatcggggg acgataacct ag 262

<210> 4723  
 <211> 473  
 <212> DNA  
 <213> Glycine max

<223> unsure at all n locations  
 <400> 4723

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 ctagagggaa gctcaaaaac tcccaacaca catttcattg tcaatatgtt cttttcaaaa 120  
 ttgttcccaa acaaaattgc atcatgcata ttatagatga gatgcttta tttgataatc 180  
 tccaacctta tagcccgaaa attttgact acactcttca tcattccacc aagaccttct 240  
 ctagcaattg ggaaaagaag atgagagagg gaatctcctt gtcttaatcc tcaagagagt 300  
 gtgaattttg ttgttgggtt gtcagattac aagaactaca actattgtag ttaagaggca 360  
 ttcacaaatc caactccttc acttatattt gaaaaaccaa atctacccat catatagtcc 420